

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 9, 2005, 13:00:54 ; Search time 44 Seconds
(without alignments)
1355.559 Million cell updates/sec

Title: US-10-018-418A-4

Perfect score: 4276

Sequence: 1 MSSAVASAFSLASAPG.....SMEHAKLYEDVLKAKYQW 799

Scoring table:

BLASTN62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep:*
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6: /cgn2_6/ptodata/1/1aa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4075	95.3	799	3	US-09-196-390-6
2	4075	95.3	799	4	US-09-952-677-6
3	2432	56.9	669	3	US-08-941-445A-9
4	2314.5	54.1	698	3	US-08-941-445A-11
5	2163	50.6	801	4	US-09-388-743-26
6	2163	50.6	801	4	US-10-044-543-26
7	2150.5	50.3	767	3	US-08-836-567-8
8	2150.5	50.3	767	4	US-09-606-304-8
9	2063	48.2	690	4	US-09-388-743-6
10	2063	48.2	690	4	US-10-044-543-6
11	2059	48.2	558	3	US-08-836-567-6
12	2059	48.2	558	4	US-09-606-304-6
13	1201.5	28.1	649	3	US-09-192-909-2
14	1201.5	28.1	649	4	US-09-931-297-2
15	1176	27.5	641	3	US-08-836-567-10
16	1176	27.5	641	4	US-09-606-304-10
17	1138.5	26.6	671	4	US-09-196-390-2
18	1138.5	26.6	671	4	US-09-952-677-2
19	1066	24.9	583	3	US-08-941-445A-13
20	1051.5	24.6	539	3	US-08-941-445A-21
21	1004.5	23.5	459	3	US-08-836-567-4
22	1004.5	23.5	459	4	US-09-606-304-4
23	907	21.2	616	4	US-09-388-743-14
24	907	21.2	616	4	US-10-044-543-14
25	885	20.7	615	4	US-09-388-743-2
26	885	20.7	615	4	US-10-044-543-2
27	869	20.3	533	3	US-08-941-445A-5

28	869	20.3	604	4	US-09-731-166-4	Sequence 4, Appli
29	867	20.3	600	4	US-09-388-743-22	Sequence 22, Appl
30	867	20.3	600	4	US-10-044-543-22	Sequence 22, Appl
31	862	20.2	609	3	US-08-941-445A-7	Sequence 7, Appli
32	841	19.7	614	4	US-09-388-743-18	Sequence 18, Appl
33	841	19.7	614	4	US-10-044-543-18	Sequence 18, Appl
34	770.5	18.0	484	4	US-09-107-433-4468	Sequence 4468, Ap
35	766.5	17.9	477	4	US-09-583-110-3812	Sequence 3812, Ap
36	706	16.5	479	4	US-09-902-540-14647	Sequence 14647, A
37	607	14.2	511	4	US-09-489-039A-11033	Sequence 11033, A
38	599	14.0	477	1	US-07-735-065-2	Sequence 2, Appli
39	599	14.0	477	1	US-08-469-202-12	Sequence 12, Appl
40	599	14.0	477	2	US-08-484-434C-12	Sequence 12, Appl
41	599	14.0	477	4	US-09-384-361-12	Sequence 12, Appl
42	587.5	13.7	533	4	US-09-388-743-10	Sequence 10, Appl
43	587.5	13.7	533	4	US-10-044-543-10	Sequence 10, Appl
44	572.5	13.4	735	3	US-09-115-704-2	Sequence 2, Appli
45	572.5	13.4	735	4	US-09-780-115-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-09-196-390-6
; Sequence 6, Application US/09196390
; Patent No. 6307125
; GENERAL INFORMATION:
; APPLICANT: Block, Martina
; APPLICANT: Lorz, Horst
; APPLICANT: Luitcke, Stephanie
; APPLICANT: Walter, Lennart
; APPLICANT: Froberg, Claus
; APPLICANT: Kosmann, Jens
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
; TITLE OF INVENTION: FROM WHEAT WHICH ARE INVOLVED IN STARCH
; TITLE OF INVENTION: SYNTHESIS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave
; STREET: 1251 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10020
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30 (BPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/196,390
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: DE 196 21 588.9
; FILING DATE: 29-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: DE 196 36 917.7
; FILING DATE: 11-SEP-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP97/02793
; FILING DATE: 28-MAY-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Haley, Jr., James F.
; REGISTRATION NUMBER: 27,794
; REFERENCE/DOCKET NUMBER: AGREVO-9
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 596-9000
; TELEFAX: (212) 596-9090
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 799 amino acids

TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-196-390-6

Query Match 95.3%; Score 4075; DB 3; Length 799;

Best Local Similarity 95.6%; Pred. No. 0;
Matches 764; Conservative 7; Mismatches 28; Indels 0; Gaps 0;

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   |||
QY 121 PPSMNGTPVNGENKSTGGGATKDSGLPAPARAPHPSTONRVVNGENKANYASPTSTIA 180
   |||
DB 121 PPSMNGMPVNGENKSTGGGATKDSGLPTPARAPHPSTONRAVPNGENKANYASPTSTIA 180
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QY 181 EVVAPDSATTSISDKAPESVVPAAKPPSSGSNFVVSASAPRLDISDVEBELKKGAVI 240
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DB 181 EAAASDSAATTSISDKAPESVVPAAKTPSSGSNFESSASAPGSDTVSDEBELKKGAVV 240
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QY 241 VEEAPNPKALSPPAAPAVOEDLMDPKYTGFEPEVPAKDDGNAVADDAAGSFEHQNHDSG 300
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DB 241 VEEAPNPKALSPPAAPAVOEDLMDPKYTGFEPEVPAKDDGNAVADDAAGSFEHQNHDSG 300
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DB 361 GVRKYKKAAGOMENVVYFAHYIDGVFVFIIDAPLFPHROBDIYGGSRQIMRMILFCKA 420
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DB 481 QGRGPVDEFPTELPEHYLHFRLYDPVGEHANYPEAQLKMAQVYVVSFGYLMELKTV 540
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DB 541 EGGMGJLHDIIRQNDMKTGRIVNGIDMENNPEVDVHAKSDGYTNFSLRTLDSGKROCKEA 600
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QY 601 LQRELGLQVRADVPYLLGFIRLDGQKGVETIADAMWIVSODVQVLMGTGRHDLSEMLR 660
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DB 661 HFEREHNDYKRGVGVSVLHNRITAGADALLMPSRFEPGGLNQLYAMA YGVVAVHAGV 720
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QY 721 GVRDTPYPPDPFPHSGLGWTFDRAEAKHLI EALGHLRTYRDYKESWRGLQERQMSQDS 780
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DB 721 GVRDTPYPPDPFPHSGLGWTFDRAEAKHLI EALGHLRTYRDYKESWRGLQERQMSQDS 780
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QY 781 WEHAATLYEDVLLKAKYQW 799
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DB 781 WEHAATLYEDVLLKAKYQW 799
   |||

```

RESULT 2

US-09-952-677-6

Sequence 6, Application US/09952677

Patent No. 6734339

GENERAL INFORMATION:

APPLICANT: Block, Martina

Lorz, Horst

Luticke, Stephanie
Walter, Lennart
Proberg, Claus
Kosmann, Jens
TITLE OF INVENTION: NUTRIENT ACID MOLECULES ENCODING ENZYMES
FROM WHEAT WHICH ARE INVOLVED IN STARCH
SYNTHESIS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave

STREET: 1251 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: United States of America

ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/952,677

FILING DATE: 14-Sep-2001

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/196,390

FILING DATE: 19-No. 6734339-1998

APPLICATION NUMBER: DE 196 21 588.9

FILING DATE: 29-MAY-1996

APPLICATION NUMBER: DE 196 36 917.7

FILING DATE: 11-SEP-1996

APPLICATION NUMBER: PCT/EP97/02793

FILING DATE: 28-MAY-1997

ATTORNEY/AGENT INFORMATION:

NAME: Haley, Jr., James F.

REGISTRATION NUMBER: 27,794

REFERENCE/DOCKET NUMBER: AGREVO-9

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 596-9000

TELEFAX: (212) 596-9090

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 799 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

Query Match 95.3%; Score 4075; DB 4; Length 799;
Best Local Similarity 95.6%; Pred. No. 0;
Matches 764; Conservative 7; Mismatches 28; Indels 0; Gaps 0;

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DB 1 MSSAVASASFLALASASPGRRRRRVSAPPPHAGAGRLHWPMPMPORTADGVAAALA 60
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DB 121 PPSMNGMPVNGENKSTGGGATKDSGLPTPARAPHPSTONRAVPNGENKANYASPTSTIA 180
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QY 181 EVVAPDSATTSISDKAPESVVPAAKPPSSGSNFVVSASAPRLDISDVEBELKKGAVI 240
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DB 181 EAAASDSAATTSISDKAPESVVPAAKTPSSGSNFESSASAPGSDTVSDEBELKKGAVV 240
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Db 361 GVRKYYKAAGDMENVFAHYTDGDFVFIADPLFRHOEDYIGSSROEIMKRMILFCKA 420
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Db 481 QGRGVDFEFPTELPEHYLEHRLYDPVGEHANYFAAGLXADQVVVSPGYLWELKTV 540
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Db 541 EGGWGLHIIIRONDMDKTRGIYVGIIDNMENPEVDNHLKSDGYTNFSKTLDSGKQCKEA 600
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Db 601 LORELGLVADVPPLGFTIGRLDGQKGYEIIADAMPWISODVOLVMLGTGRHDESLMR 660
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Db 661 HFERHHDKVRGWGFSVRLAHRITAGADALIMPSRFBPCGLNOLYMAAYGTVPVHAAG 720
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Db 721 GLRDVPFPDPNNHSGLMTFDRABAHKLEALGHCLTTRDYKSMGLQERGSODFS 780
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Db 781 MEHAALYEDVLLKAKYOM 799

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RESULT 3

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US-08-941-445A-9
: Sequence 9, Application US/08941445A
: Patent No. 6107060

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: GENERAL INFORMATION:
: APPLICANT: Keeling, Peter
: APPLICANT: Guan, Hanning
: TITLE OF INVENTION: Starch Encapsulation
: NUMBER OF SEQUENCES: 37
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Greenlee, Wimer and Sullivan, P.C.
: STREET: 5370 Manhattan Circle
: CITY: Boulder
: STATE: CO
: COUNTRY: US
: ZIP: 80303
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/941.445A
: FILING DATE: 30-SEP-1997
: CLASSIFICATION: 800
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/026,855
: FILING DATE: 30-SEP-1996
: ATTORNEY/AGENT INFORMATION:
: NAME: Wimer, Ellen P
: REGISTRATION NUMBER: 28,547
: REFERENCE/DOCKET NUMBER: 89-97
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (303) 499-8080
: TELEFAX: (303) 499-8089
: INFORMATION FOR SEQ ID NO: 9:
: SEQUENCE CHARACTERISTICS:

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: LENGTH: 669 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
US-08-941-445A-9

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Query Match 56.9%; Score 2432; DB 3; Length 669;
Best Local Similarity 65.0%; Pred. No. 1,56-214;
Matches 486; Conservative 58; Mismatches 120; Indels 84; Gaps 12;

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Qy 57 AARAAGKADAVDDAASARQPRARRGATKVAERDPPVKTLDRAAGCAPAPRPRQ 116
Db 1 AEAAGKADAPERSGDAARLPARRRNA--VSKRSDPLQ----- 37
Qy 117 DAARPPSNNGTPVNGEKSSTGGGATDQSGLPARAPHPSTONRVPV---GENKANVA 173
Db 38 -----PVRYSATGN-----TARTGAASCONAALADVEIVEIKSTVA 75
Qy 174 SPTSLAEVVAADPAATISIDKAPESVPAEKPPSSGSNFVVSASAPRLDIDVBE 233
Db 76 APFTSYKFPGRGQDDPSLMDIAPETVLPAPKPLHES-----PAVDGDN----- 121
Qy 234 LKGAIVIEAEPKALSPRAA-DAVEDLWDFPKXYIGFEEVPEAKODGMAVADAGSFE 292
Db 122 -----GLAPFVEPLVQBATWDFKXYIGFDEPDEAKODSRVAGADAGSFE 166
Qy 293 HHQNHDSPLAGENVVNVVVAACSPMCKTGIGDVGALPKALAKRGHVVVVPRY 352
Db 167 HYGTMILG-LCGENVNVVIVVAACSPMCKTGIGDVGALPKALAKRGHVVVVPRY 225
Qy 353 DYEAAVDVGVKYYKAAGDMENVFAHYTDGDFVFIADPLFRHOEDYIGSSROEIMK 412
Db 226 DYBAFDMGIRKYYKAAGDMENVFAHYTDGDFVFIADPLFRHOEDYIGSSROEIMK 284
Qy 413 RMILFCRAAVEPWHVPCGVPYGDGDLVFIANDMHTALLPVYLKAYRDHGLMOYTRSI 472
Db 285 RMILFCRAAVEPWHVPCGVPYGDGDLVFIANDMHTALLPVYLKAYRDHGLMOYTRSI 344
Qy 473 MVINIAHQGRGPDEFPTELPEHYLEHRLYDPVGEHANYFAA-GLXADQVVVSP 531
Db 345 LVHNIHQGRGPDEFPTELPEHYLEHRLYDPVGEHANYFAA-GLXADQVVVSP 404
Qy 532 GYLWELKTVEGSGWGLHIIIRONDMDKTRGIYVGIIDNMENPEVDNHLKSDGYTNFSKTL 591
Db 405 GYLWELKTVEGSGWGLHIIIRONDMDKTRGIYVGIIDNMENPEVDNHLKSDGYTNFSKTL 464
Qy 592 SGKQCKEALORELGLVADVPPLGFTIGRLDGQKGYEIIADAMPWISODVOLVMLGTG 651
Db 465 AGKQCKEALORDVGLERDVPPLGFTIGRLDGQKGYEIIADAMPWISODVOLVMLGTG 524
Qy 652 RHDLSEMLRPEREHHDKVRGWGFSVRLAHRITAGADALIMPSRFBPCGLNOLYMAAYG 711
Db 525 PPDLEMLQHLERHHPKVRGWGFSVRLAHRITAGADALIMPSRFBPCGLNOLYMAAYG 583
Qy 712 TVPVVHAGVGRDVPFPDPNNHSGLMTFDRABAHKLEALGHCLTTRDYKSMGLQ 771
Db 584 TVPVVHAGVGRDVPFPDPNNHSGLMTFDRABAHKLEALGHCLTTRDYKSMGLQ 643
Qy 772 ERGMSODFSMEHAALYEDVLLKAKYOM 799
Db 644 ARGMSQNLMSMDHAALYEDVLL--KYOM 669

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RESULT 4

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US-08-941-445A-11
: Sequence 11, Application US/08941445A
: Patent No. 6107060

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: GENERAL INFORMATION:
: APPLICANT: Keeling, Peter
: APPLICANT: Guan, Hanning
: TITLE OF INVENTION: Starch Encapsulation
: NUMBER OF SEQUENCES: 37
: CORRESPONDENCE ADDRESS:

```

ADDRESSER: Greenlee, Winner and Sullivan, P. C.
STREET: 5370 Manhattan Circle
CITY: Boulder
STATE: CO
COUNTRY: US
ZIP: 80303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/941,445A
FILING DATE: 30-SEP-1997
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/026,855
FILING DATE: 30-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Winner, Ellen P
REGISTRATION NUMBER: 28,547
REFERENCE/DOCKET NUMBER: 89-97
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 499-8080
TELEFAX: (303) 499-8080
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 698 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-941-445A-11

Query Match 54.1%; Score 2314.5; DB 3; Length 698;
Best Local Similarity 57.9%; Pred. No. 1e-203;
Matches 468; Conservative 76; Mismatches 145; Indels 119; Gaps 15;

1 MSSAVASAFPLALASAPGRSRRARVGA---PPHPAG-RLHWP-FWPPORTARDG 55
1 MEGALISSSSAFLLPVAASSPPRRKRSVGAALRSYCSAEIRLHMARGPQ-----DGA 56
56 VAAAAAGKDAVDDAA--SARQPRARRGAAATKVAERDPVKTLDRAAEGAPAP 112
57 ASVRAAAPAGGESEEAASSSSQAGVQSTAKAV-----DSASPPPLTS 104
113 AARQDAARPPSMNGTPVNGENKSTGGCGATXDSGLPARAPHPSTQNPVNGENKANV 172
105 ARQ-----SQSAMQNG--TSGSSASTAAPVSGP-KADHP----- 139
173 ASPTSIAEVVPDSATISISDKAPESVVPAPKPPSSGSNFVVSASAPRLIDSDV 232
140 -----APYTKREIDAS-----AVKPEPAG-----DARP 163
233 ELKGAIVIEAPNPRAKSPAPAAVAOEDLWDFKTYIGFEEPEVAKDGMVAADAGSFE 292
164 -----YES-----IGIAEPVDAKADAAPATDAASAP 190
293 H-HQNHDSGLPAGENVNNTVVAABGSPWCKTGGLGVAGALPKLAKRGHVMVVPY 351
191 YRENDIEPPLAGPNMNVVVAABGAPCKTGGLGVAGALPKLAKRGHVMVVPY 250
352 GDEEAYDVGRKYYKAGODMEVNFHAYIDGVDFEFLADPLFRHRODIYGSROEIM 411
251 GEYAEARDDGVRRRYVAGODSEVITYFHSYIDGVDFEYEAPEFRHNNITYGGERLDL 310
412 KEMILFCKAAVEVPMHVPCCGVVPGDGNLVPFIANDMHTALLPYLYKAYYRDHGLMQYTS 471
311 KEMILFCKAAVEVPMHVPCCGVVPGDGNLVPFIANDMHTALLPYLYKAYYRDHGLMQYTS 370
472 INVINHIAOGRGVDFEFTELPEHYLLEHFRLYDVPVGEHANYPAAAGKMAOVVVP 531
371 VLVINHIAOGRGVDFEFTELPEHYLLEHFRLYDVPVGEHANYPAAAGKMAOVVVP 430

532 GYLWELKTEGGMGLHDIIRQNDWKTGRGVNGIDNMENMPEDVHLKSDGYTNFSLGTL 591
431 GYMELKTSSEGGMGLHDIIRQNDWKTGRGVNGIDNMENMPEDVHLKSDGYTNFSLGTL 490
592 SGKQCKEALORELGLQVRAVPLPLGIGRIDGQKGVETIADAMPVYSQOVLMGTG 651
491 TGRQCKEALORELGLQVRAVPLPLGIGRIDGQKGVETIADAMPVYSQOVLMGTG 550
652 RHDLESMLRFEREHHQVYRGWVSVYLAHRTAGADALMPSPFPCGLNOLYAMAYG 711
551 RADLEDMLRFEREHHQVYRGWVSVYLAHRTAGADALMPSPFPCGLNOLYAMAYG 610
712 TVPVHAGVGRDTPVPPDPFNHSGLGWTFDRAEAKHLEALGHCLRTYDYKESWRLQ 771
611 TVPVHAGVGRDTPVPPDPFNHSGLGWTFDRAEAKHLEALGHCLRTYDYKESWRLQ 670
772 ERGMSQDPSEWHEALTYEDVLLKAKYQW 799
671 ARGMAEDLSMDHAAVLYEDVLLKAKYQW 698

RESULT 5
US-09-388-743-26
Sequence 26, Application US/09388743
Patent No. 6423886
GENERAL INFORMATION:
APPLICANT: Singletary, George
TITLE OF INVENTION: No. 6423886el Starch Synthase Polynucleotides and Their
FILE REFERENCE: 1144
CURRENT APPLICATION NUMBER: US/09/388,743
CURRENT FILING DATE: 1999-09-02
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 26
LENGTH: 801
TYPE: PRT
ORGANISM: Typha latifolia
US-09-388-743-26

Query Match 50.6%; Score 2163; DB 4; Length 801;
Best Local Similarity 60.7%; Pred. No. 1.1e-189;
Matches 426; Conservative 84; Mismatches 151; Indels 41; Gaps 9;

124 KSTGGGATKXG--LPAPAPHPSTQNPVNGENKANYASPTSIAEVVPDSATI 191
21 RATGSGSFEEBEGEVRGAGVDDALRATIDKSNE--ILATSNLLOQIAKKNIVS 78
192 SI-SKAPD-----SVPAEKPPSSG-----SNFVVA-- 219
79 SIRSDVTKEENDSSLYVEKENLEPSSGEONGKYSAGAVNNYSQAOODTSNPLVNSFG 138
220 SAPRLIDSDVPELKKGAIVIEAPNPRAKSP--AAPVAOEDLWDFKTYIGFEEPEVA 277
139 GSPKDNVEA--VEFYRQSAVDAFGRPPEPSPGTTKILSPFYLEASDAKEMADLVEA 197
278 KODGAAVVDAPDAPFHHQNHDSGLPAGENVNNTVVAABGSPWCKTGGLGVAGALPKL 337
198 KUDSVHVDKDLNPG--ENEVPLPLAGANVMNITVVAABGSPWCKTGGLGVAGALPKL 255
338 ARGRHVMVVPYRYDYDEAYDVGRKYYKAGODMEVNFHAYIDGVDFEFLADPLFRH 397
256 ARGRHVMVVPYRYDYDEAYDVGRKYYKAGODMEVNFHAYIDGVDFEFLADPLFRH 315
398 ROEDTYGSSROEIMKRMILFCKAAVEVPMHVPCCGVVPGDGNLVPFIANDMHTALLPYLYK 457
316 RQNRITYEGNRVDILKRMILFCKAAVEVPMHVPCCGVVPGDGNLVPFIANDMHTALLPYLYK 375
458 AYPRHGLMOYRSGIMVHNTAHQGRGVDFEFTELPEHYLLEHFRLYDVPVGEHANYP 517
376 AYPRHGLMOYRSGIMVHNTAHQGRGVDFEFTELPEHYLLEHFRLYDVPVGEHANYP 435

Qy 518 AGLKADVVVVSPGYLMEKLTVEGCGWGLHDIIRONDKTRGIVNGIDNMENPEVDVHL 577
Db 436 AGLKADVVVVSHGYAMELKTSEGGWGLHEIIRNSNMKFGIIVNGIDAKEMSPFVDHL 495
Qy 578 KSDGTNLSLTLDGSKKQCKEALQRELGQVRAVPLIFGRIDGQKVEIITADAMPW 637
Db 496 KSDGTNLSLTLDGSKKQCKEALQRELGQVRAVPLIFGRIDGQKVEIITADAMPW 555
Qy 638 IVSDVQVLMGTGGRHDIEMLRHFERHDKVRCWGVFSVRLAHRTAGADALIMPSRF 697
Db 556 IVSHDVQVLMGTGGRHDIEMLRHFERHDKVRCWGVFSVRLAHRTAGADALIMPSRF 615
Qy 698 EPCGNIOLYAMAYGTIPVHAHVGVDRDTPPEPDPNHSGLGWTFRABAKHLEALGHCL 757
Db 616 EPCGNIOLYAMAYGTIPVHAHVGVDRDTPPEPDPNHSGLGWTFRABAKHLEALGHCL 675
Qy 758 RTYDYESRGLQERGMSPDSWEHAKLYEDVLLKAKYQW 799
Db 676 RTYDYESRGLQERGMSPDSWEHAKLYEDVLLKAKYQW 717

RESULT 6
US-10-044-543-26

Sequence 26, Application US/10044543
Patent No. 6734341
GENERAL INFORMATION:
APPLICANT: Singleary, George
APPLICANT: Zhou, Ian
TITLE OF INVENTION: No. 6734341el Starch Synthase Polynucleotides
TITLE OF INVENTION: and Their Use in the Production of New Starches
FILE REFERENCE: 1144D
CURRENT APPLICATION NUMBER: US/10/044,543
PRIOR FILING DATE: 2002-01-11
PRIOR APPLICATION NUMBER: 09/388,743
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 26
LENGTH: 801
TYPE: PRT
ORGANISM: Typha latifolia
US-10-044-543-26

Query Match 50.6%; Score 2163; DB 4; Length 801;

Best Local Similarity 60.7%; Pred. No. 1.1e-189; Matches 426; Conservative 84; Mismatches 151; Indels 41; Gaps 9;

Qy 134 KSTGGGATKDSG--LPAPAPAPHPSTQNVVNGENKANVASPTSIAYVAVPDSATI 191
Db 21 RATGSGSFEEGEREGVGAAGDDALRATIDKSN--ILAIHSNLLQAIARKNIVS 78
Qy 192 SI-SDKAP-----SVPAEKPPSSG-----SNFVSA-- 219
Db 79 SIRSDVTKENDSSSYVEKENLEPSSGQNGKYSGAVPNNYSOLAQDPTSENPLVNSFG 138
Qy 220 SAPRLDIDSDVEPLKGAIVVEEAPNPKALSP--AAPAVQEDLMPKKTIGEEPEEA 277
Db 139 GSPKONVEA-VEFYVRSADVAFGRPEEPSLGTTKIISPFYLEASDPAKKNEDLVEA 197
Qy 278 KDDGMAVADDAAGSEEHQNHDSGLAGENVANVVAECSPPCKTGGLGAVAGALPKAL 337
Db 198 KLDVNHKXDLNPE--ENEYPLPLAGANVNIIVAAECAPKSTGGLGAVAGALPKAL 255
Qy 338 AKRGHVVVVPRYGYEAVDVGRKYYKAAAGDMEVNYFHAYIDGVFVIDAPLERH 397
Db 256 ARRGHVVVVPRYGYEAVDVGRKYYKAAAGDMEVNYFHAYIDGVFVIDAPLERH 315
Qy 398 RQEDIYGSROEIKMKMLFCKAIVEVPMHPCGVPVGGDNLVFIANDMTALLPYTLK 457
Db 316 RGNRIYEGNRVDILKRMILFCKAIVEVPMHPCGVPVGGDNLVFIANDMTALLPYTLK 375
Qy 458 AYYDHGLMOYTRSIIMVYHNAHQGRGVDFPTELEHLEFRLYDPVGEHANYFA 517

Db 376 AYYRNDGLMKYARSVLYHNIHAHQGRGVDFPTELEHLEFRLYDPVGEHANYFA 435
Qy 518 AGLKADVVVVSPGYLMEKLTVEGCGWGLHDIIRONDKTRGIVNGIDNMENPEVDVHL 577
Db 436 AGLKADVVVVSHGYAMELKTSEGGWGLHEIIRNSNMKFGIIVNGIDAKEMSPFVDHL 495
Qy 578 KSDGTNLSLTLDGSKKQCKEALQRELGQVRAVPLIFGRIDGQKVEIITADAMPW 637
Db 496 KSDGTNLSLTLDGSKKQCKEALQRELGQVRAVPLIFGRIDGQKVEIITADAMPW 555
Qy 638 IVSDVQVLMGTGGRHDIEMLRHFERHDKVRCWGVFSVRLAHRTAGADALIMPSRF 697
Db 556 IVSHDVQVLMGTGGRHDIEMLRHFERHDKVRCWGVFSVRLAHRTAGADALIMPSRF 615
Qy 698 EPCGNIOLYAMAYGTIPVHAHVGVDRDTPPEPDPNHSGLGWTFRABAKHLEALGHCL 757
Db 616 EPCGNIOLYAMAYGTIPVHAHVGVDRDTPPEPDPNHSGLGWTFRABAKHLEALGHCL 675
Qy 758 RTYDYESRGLQERGMSPDSWEHAKLYEDVLLKAKYQW 799
Db 676 RTYDYESRGLQERGMSPDSWEHAKLYEDVLLKAKYQW 717

RESULT 7

US-08-836-567-8
Sequence 8, Application US/08836567
Patent No. 6130367
GENERAL INFORMATION:

APPLICANT: Kosmann, Jens
APPLICANT: Springer, Franziska
APPLICANT: Abel, Gernot
TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
TITLE OF INVENTION: INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESS: FISH & NEAVE
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/836,567
FILING DATE: 24-JUL-1997
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/EP95/04415
FILING DATE: 09-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P 44 41 408.0
FILING DATE: 10-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: Haley Jr., James F.
REGISTRATION NUMBER: 27,794
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-596-9090
TELEFAX: 212-596-9090
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 767 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-836-567-8
Query Match 50.3%; Score 2150.5; DB 3; Length 767;

Best Local Similarity 54.3%; Pred. No. 1.5e-188;
Matches 426; Conservative 104; Mismatches 188; Indels 67; Gaps 10;

[illegible]

RESULT 8
 US-09-606-304-8
 ; Sequence 8, Application US/09606304
 ; Patent No. 6483010
 ; GENERAL INFORMATION:
 ; APPLICANT: Kosmann, Jens
 ; Springer, Franziska
 ; Adel, Gernot
 ; TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
 ; INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC
 ; PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES
 ; NUMBER OF SEQUENCES: 17
 ; CORRESPONDENCE ADDRESS:
 ;

[illegible]

Db 463 PHVMDPFLYDVPGEHFNIFAAGLKTADRVVTVSHGYSWEIKTSQGGMGLHQIINEND 522
Qy 555 WTRRIGVINGIDMMENPEVDVHLKSDGYTNFSLGTLDSKROCKELAQBELQVRADVP 614
Db 553 WLDQGIIVGIDTRKENNELVDVHLQSGFYNNYSIDLTLQTKPCKALQKELQPRADDVP 582
Qy 615 ILGFGIRLDGQKGVIELIADAMPWISQDVQLVMLGTGRDLDSMLRHFREHHDVYRGV 674
Db 583 LIGFGIRLDPOKGVDLIAASAMMGQDVQLVMLGTGRDLDSMLRHFREHHDVYRGV 642
Qy 675 GFSVLAHRITAGADALLMPSRFEPGGLNQLYAMA YGTVPVVHAGVGVDTVPDPFNH 734
Db 643 GFSVLAHRITAGADALLMPSRFEPGGLNQLYAMA YGTVPVVHAGVGVDTVPDPFNH 702
Qy 735 SGLGTFPRAEAKHLEALGHLCTYRDYKESWGLQGRGMSODPSWEHAKLYEDVLK 794
Db 703 SGLGTFPRAEAKHLEALGHLCTYRDYKESWGLQGRGMSODPSWEHAKLYEDVLK 762
Qy 795 AKYQW 799
Db 763 AKYQW 767

RESULT 9
US-09-388-743-6
; Sequence 6, Application US/09388743
; Patent No. 6423886
; GENERAL INFORMATION:
; APPLICANT: Singletary, George
; APPLICANT: Zhou, Ian
; TITLE OF INVENTION: No. 6423886:1 Search Synchase Polynucleotides and Their
; TITLE OF INVENTION: Use in the Production of New Starches
; FILE REFERENCE: 1144
; CURRENT APPLICATION NUMBER: US/09/388,743
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 690
; TYPE: PRT
; ORGANISM: Curcuma zedoaria
US-09-388-743-6

Query Match 48.2%; Score 2063; DB 4; Length 690;
Best Local Similarity 56.0%; Pred. No. 1.4e-180;
Matches 404; Conservative 80; Mismatches 166; Indels 72; Gaps 9;

Qy 109 PAPPAP-----RQDAARP-----PSMNGTVPNGENKSTGGGATKDSGL-----PAP 150
Db 10 PAPPAPGASCRLLHGGARPLGHSPLCWANPLCTSRFMAGLSEVKKGSKITLKHIDHTGS 69
Qy 151 ARAP-----HPTONRVPVNGENKANVASPPTISIAEVVAPDSATISIDKAPESVVP 203
Db 70 ARTMRFLNALYHGSGADLVPIINHRGKSSGAVGRSINID-IGEDSNQDVLDIADDSYAQIME 128
Qy 204 AEKPPSSGSNFVVSASAPRLDIDSDVPELKKG-----AVIEEAPNPALSPPAAPA 257
Db 129 QSKVLEMQRLTLQOIIEKR-NFSEETESYVKXDENLGIYA EAVYQTSNNOQEARP----- 183
Qy 258 VOEDLMDPKKTYIGFEPEYEAQDDMAVADDAAGFEHHQNHSGSLAGENNVMVVVVAEC 317
Db 184 -----EEG-----NLSNPLAGPVMNIIILVAEC 208
Qy 318 SPWCKTGIGDVAGALPPLAKRGHRVWVVPVRYGDYEAVGVYKTYKAAAGODMEVNY 377
Db 209 APWCKTGIGDVAGALPPLAKRGHRVWVVPVRYGDYEAVGVYKTYKAAAGODMEVNY 268
Qy 378 PHAYIDGVDFVFIAPLFRHROEDTYGSGROEIMKRMILFCAAVEVPMHTPCGGVPYGD 437
Db 269 YHTYIDSDVDFVFIAPLFRHROEDTYGSGROEIMKRMILFCAAVEVPMHTPCGGVPYGD 328
Qy 438 GNLVFIAIDMHTALLPVYLKAYYRDHGLMOYTRSLMVIHNTAHQGRGVVDEPFFELPEH 497

Db 329 GNLVFIAIDMHTALLPVYLKAYYRDHGLMOYTRSLMVIHNTAHQGRGVVDEPFFELPH 388
Qy 498 YLEHRLYDVPVGEHFNIFAAGLKTADRVVTVSHGYSWEIKTSQGGMGLHQIINEND 557
Db 389 HIDSFRLLDPVGEHFNIFAAGLKTADRVVTVSHGYSWEIKTSQGGMGLHQIINEND 448
Qy 558 RGVINGIDMMENPEVDVHLKSDGYTNFSLGTLDSKROCKELAQBELQVRADVPILG 617
Db 449 HGVINGIDMMENPEVDVHLKSDGYTNFSLGTLDSKROCKELAQBELQVRADVPILG 508
Qy 618 FIGRLDGQKGVIELIADAMPWISQDVQLVMLGTGRDLDSMLRHFREHHDVYRGVGS 677
Db 509 FIGRLDGQKGVIELIADAMPWISQDVQLVMLGTGRDLDSMLRHFREHHDVYRGVGS 568
Qy 678 VRLAHRITAGADALLMPSRFEPGGLNQLYAMA YGTVPVVHAGVGVDTVPDPFNH 737
Db 569 VRLAHRITAGADALLMPSRFEPGGLNQLYAMA YGTVPVVHAGVGVDTVPDPFNH 628
Qy 738 GWTFRABAHKLEALGHLCTYRDYKESWGLQGRGMSODPSWEHAKLYEDVLK 797
Db 629 GWTFRABAHKLEALGHLCTYRDYKESWGLQGRGMSODPSWEHAKLYEDVLK 688
Qy 798 QW 799
Db 689 QW 690

RESULT 10
US-10-044-543-6
; Sequence 6, Application US/10044543
; Patent No. 6734341
; GENERAL INFORMATION:
; APPLICANT: Singletary, George
; APPLICANT: Zhou, Ian
; TITLE OF INVENTION: No. 6734341:1 Search Synchase Polynucleotides
; TITLE OF INVENTION: and Their Use in the Production of New Starches
; FILE REFERENCE: 1144D
; CURRENT APPLICATION NUMBER: US/10/044,543
; CURRENT FILING DATE: 2002-01-11
; PRIOR APPLICATION NUMBER: 09/388,743
; PRIOR FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 690
; TYPE: PRT
; ORGANISM: Curcuma zedoaria
US-10-044-543-6

Query Match 48.2%; Score 2063; DB 4; Length 690;
Best Local Similarity 56.0%; Pred. No. 1.4e-180;
Matches 404; Conservative 80; Mismatches 166; Indels 72; Gaps 9;

Qy 109 PAPPAP-----RQDAARP-----PSMNGTVPNGENKSTGGGATKDSGL-----PAP 150
Db 10 PAPPAPGASCRLLHGGARPLGHSPLCWANPLCTSRFMAGLSEVKKGSKITLKHIDHTGS 69
Qy 151 ARAP-----HPTONRVPVNGENKANVASPPTISIAEVVAPDSATISIDKAPESVVP 203
Db 70 ARTMRFLNALYHGSGADLVPIINHRGKSSGAVGRSINID-IGEDSNQDVLDIADDSYAQIME 128
Qy 204 AEKPPSSGSNFVVSASAPRLDIDSDVPELKKG-----AVIEEAPNPALSPPAAPA 257
Db 129 QSKVLEMQRLTLQOIIEKR-NFSEETESYVKXDENLGIYA EAVYQTSNNOQEARP----- 183
Qy 258 VOEDLMDPKKTYIGFEPEYEAQDDMAVADDAAGFEHHQNHSGSLAGENNVMVVVVAEC 317
Db 184 -----EEG-----NLSNPLAGPVMNIIILVAEC 208
Qy 318 SPWCKTGIGDVAGALPPLAKRGHRVWVVPVRYGDYEAVGVYKTYKAAAGODMEVNY 377
Db 209 APWCKTGIGDVAGALPPLAKRGHRVWVVPVRYGDYEAVGVYKTYKAAAGODMEVNY 268

[illegible]

RESULT 11
 US-08-836-567-6
 / Sequence 6, Application US/08836567
 / Patent No. 6130367
 / GENERAL INFORMATION:
 / APPLICANT: Kossmann, Jens
 / APPLICANT: Springer, Franziska
 / APPLICANT: Abel, Gernot
 / TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
 / TITLE OF INVENTION: INVOLVED IN STARCH SYNTHESIS VECTORS
 / TITLE OF INVENTION: PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES
 / NUMBER OF SEQUENCES: 17
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: FISH & NEAVE
 / STREET: 1251 Avenue of the Americas
 / CITY: New York
 / STATE: New York
 / COUNTRY: USA
 / ZIP: 10020
 /
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: PatentIn Release #1.0, Version #1.30
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: US/08/836, 567
 / FILING DATE: 24-JUL-1997
 / CLASSIFICATION: 800
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: PCT/EP95/04415
 / FILING DATE: 09-NOV-1995
 / PRIOR APPLICATION DATA:
 / APPLICATION NUMBER: DE P 44 41 408.0
 / FILING DATE: 10-NOV-1994
 / ATTORNEY/AGENT INFORMATION:
 / NAME: Haley Jr., James F.
 / REGISTRATION NUMBER: 27,794
 / REFERENCE/DOCKET NUMBER: Agrevo-4
 / TELECOMMUNICATION INFORMATION:
 /

```

; TELEPHONE: 212-596-9000
; TELEFAX: 212-596-9090
; INFORMATION FOR SEQ ID NO:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 558 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-836-567-6

```

Query Match	48.2%	Score 2059;	DB 3;	Length 558;
Best Local Similarity	73.7%;	Pred. No. 2.3e-180;		
Matches 368;	Conservative 62;	Mismatches 69;	Indels 0;	Gaps 0

QY	301	LLAGEENNVAAYVAECSPMCKTGGLGADVAGLPKLXLRGHHVVVVVPPGYYEEAYDV	360
Db	60	PLACTNNWNIILVASECAPSKTGGLADVAGLPKLARKGRHVVVVAAPRYDNP	119
QY	361	GVRXYCYAAQODMEVNFYFAVIDGVDFVFIDAELEFHHRODIDGSGROEIMKMIIFCKA	420
Db	120	GVRKIITYKVDGDDEVTYIFQAFIDGVDFVFIIDSHMFHIGNNITYGKNRVLDLKKMVLFCXA	179
QY	421	AVEVPMVHPCGVVPYDGNLVFIANDMHTALLPVYLKAYYRDHGLMQYTRSINVHINIAH	480
Db	180	ALIEVPMHVPCGVGVCGDGNLVFIANDMHTALLPVYLKAYYRDNGIMNMYTRSVIYHINIAH	239
QY	481	QGRGPVDEFPFTELEPHYLFHFRLYDPVGESEHANYPAAGIXMADQVYVVS	540
Db	240	QGRPPLDFSVYDLPPTHYMDPFKLYDPVGESEHNFIFAAGIKTADRVVYVSHGSMELKTS	299
QY	541	EGCGMGLDIIIRONDMWTKRGIVNGIDMNMENPEVDYHLKSDGYNFSGLTSDSGROCKEA	600
Db	300	QCGGMLGLOIINENDMWKLQGIIVNGIDTKEMPELDVHLQSGSYNANYLSLDTQTKPCKKA	359
QY	601	LORELEGOVADVPYLLFGIQLDQKSELEIADAMPYVVSQDVQVLMGTRHDLSEMLR	660
Db	360	LQKRLGLRPVADVPYLLFGIQLDQKGVDLIAEASAMMGQDVQVLMGTRDLDEQMLR	419
QY	661	HFEREHHDKVRGVNGVFSVRLAHRITAGADALLMPSRPECGLNQLYAMAYGVYVYHANG	720
Db	420	QFEGCHNDKIRGVNGVFSVTKSHRITAGADILLMPSRPEALRNLQYAMAKGKITPVYHANG	479
QY	721	GVRLTVPPRPDPNHSGLGWTFRDAEANKLEALGHCLRTYRDVKESSRGIQERGMSODFS	780
Db	480	GLRITVPPRPDPNFSGLGWTFRSAESQLIHALGNCILTYREYKKSWEGIQTRCMTQDLS	539
QY	781	WEHAKKLYEDVILKAKYQW 799	
Db	540	WDNAQNYEEVLLIAKQW 558	

RESULT 12
 US-09-606-304-6
 ; Sequence 6, Application US/09606304
 ; Patent No. 6483010
 ; GENERAL INFORMATION:
 ; APPLICANT: Kosemann, Jens
 ; Springer, Franziska
 ; Abel, Gernot
 ; TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
 ; INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC
 ; PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES
 ; NUMBER OF SEQUENCES: 17
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: FISH & NEAVE
 ; STREET: 1251 Avenue of the Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10020
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/606,304
FILING DATE: 28-Jun-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/836,567
FILING DATE: <Unknown>
APPLICATION NUMBER: DE P 44 41 408.0
FILING DATE: 10-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: Haley Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: Agreevo-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-596-9090
TELEFAX: 212-596-9090
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 558 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-606-304-6

Query Match 48.2%; Score 2059; DB 4; Length 558;
Best Local Similarity 73.7%; Pred. No. 2,3e-180;
Matches 368; Conservative 62; Mismatches 69; Indels 0; Gaps 0;

301 PLAGENVNVAAGSPMCKTGTGLGVAGALPKALAKGRHVNVVPRYGDYEADV 360
60 PLAGTNVNNILVASECAPMSKTGSLGVAGALPKALAKGRHVNVVPRYDNPEDDS 119
361 GVRKYYKAGQDMEVNYFHAVIDGYFVFIADAPLFRHROEDYGGSSROEIMKRMILFCKA 420
120 GVRKYYKAGQDMEVNYFHAVIDGYFVFIADAPLFRHROEDYGGSSROEIMKRMILFCKA 179
421 AVEVPMVPCGVPGYGDGNLVFIANDMHTALLPVYLKAYYRDHGMQYTRSIMVHINIAH 480
180 AIEVPMVPCGVPGYGDGNLVFIANDMHTALLPVYLKAYYRDHGMQYTRSIMVHINIAH 239
481 QGRGVNDFPTELEBENHLEHRLYDPVGEHANFPAAGLKKADQVNVVSPYLMEKLV 540
240 QGRGVNDFPTELEBENHLEHRLYDPVGEHANFPAAGLKKADQVNVVSPYLMEKLV 299
541 EGGNGLDIIIRONDKTRIGIVNGIDNMEMNPEVDVHLKSDGYTNSLGTLDGKQCKEA 600
300 QGGNGLDIIIRONDKTRIGIVNGIDNMEMNPEVDVHLKSDGYTNSLGTLDGKQCKEA 359
601 LQREIGLQVRAVPLLFGIFRLDGQGVETIADAMPVIVSDVQVLMGLTGRHDLSEMLR 660
360 LQREIGLQVRAVPLLFGIFRLDGQGVETIADAMPVIVSDVQVLMGLTGRHDLSEMLR 419
661 HFEENHKKVGMGFSRILARITAGADALLMPSRFPCCGNOUYAAYAGVPRVHAAG 720
420 QFECCHNKRIGWGFVKTSHRITAGADILLMPRFAELRLNOUYAAYAGVPRVHAAG 479
721 GVRDVPFPPFNHSGLTMTFEDBAHKLIEALGCLRTYRDYKESMGLOERGMSPDS 780
480 GLRDTVGFDFPNESGLMTFSRAASQLIHALGNCCLTYREYKKSMEGICQRCMTDLS 539
781 WEHAALYEDVLLKAKYQW 799
540 WDNAQNYEVLIAKYOI 558

APPLICANT: Jens Koesmann
APPLICANT: Claus Proberg
TITLE OF INVENTION: Nucleic acid molecules encoding soluble
TITLE OF INVENTION: starch synthases from maize
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley, Jr., c/o FISH & NEAVE
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPA)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/192,909
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/EP97/02527
FILING DATE: 16-MAY-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE 196 19 918.2
FILING DATE: 17-MAY-1996
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: GFB-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-596-9090
TELEFAX: 212-96-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 649 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-192-909-2

Query Match 28.1%; Score 1201.5; DB 3; Length 649;
Best Local Similarity 41.1%; Pred. No. 2,1e-101;
Matches 271; Conservative 86; Mismatches 210; Indels 93; Gaps 15;

176 PTSLAEVAPDPAATISISDAPESVVAEKPSPSSGSNFVVSASAPRLDIDSVEPELK 235
38 PRRIQVRLARRCVALELSEGPAPRPMPPALLAP-----DAG 289
236 KGAIVVEAPNPKALSPPAADVOEDLWDFKTYIGFEEPEVAKDDGMVAD-----DAG 289
72 -----LV-----FGTLAPAEPTGEPAL-----TPRPVPAAGLVGLVEBEGIAEG 112
290 SFEEH-----HQNHDGSLAGEN-----VMNVVVAAGSPMCKTGTGLGVAGALPKALAK 339
113 SIDMTVVVASQDSBIYVKGQAPAKTQNTVFVTGEASPAKSGGLADVCGSLPALAA 172
340 RGRHVNVVPRY-----GDYEADVGVKRYTAAAGQDMEVNYFHAVIDGVDFVFIADAP 393
173 RGRHVNVVPRYLMGTSIDKXVANAFTYEKHIRIPCFGSEHNVTFHEHVRSDVDFVDFHP 232
394 LFRHROEDYIG--GSRQEIKNRMILFCKAAVEVPMHVPCGVPGYGDGNLVFIANDMHTA 450
233 SY-HRPGNLVGDCKGAFGDNQFRYTLTCYAACEAPLVLELGYTYGQ-NCMFVNDMAS 290
451 LIPVYLKAYYRDHGMQYTRSIMVHINIAHAGRGVDFPTELEBENH-----EHF 502
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503 RLVDVPGGEHANVPAAGLKNADQVNVVSPYLMEKLVGGMGGLDIIIRONDKTRIGIVN 562
351 RRHALDKGEAVNPLKGAIVVTAIDRIIVTVSKGSWEVTTABEGGGLNELLSSKSVLNGIVN 410

APPLICATION NUMBER: DE P 44 41 408.0
 FILING DATE: 10-NOV-1994
 ATTORNEY/AGENT INFORMATION:
 NAME: Haley Jr., James F.
 REGISTRATION NUMBER: 27,794
 REFERENCE/DOCKET NUMBER: Agrevo-4
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 212-596-9000
 TELEFAX: 212-596-9090
 INFORMATION FOR SEQ ID NO: 10:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 641 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-836-567-10

Query Match 27.5%; Score 1176; DB 3; Length 641;
 Best Local Similarity 45.2%; Pred. No. 4.7e-99;
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 QY 439 NLVFIANDMHTALLPVLYKAYYRDHLMQYTRSIWVHNIAHQGRGVDEPFTLPENY 498
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 DB 390 SSRQSVLNGITNGIDVNDMNPSTDEHTAS---HYSINDL--SKYQCKTDLQKEIGLPIR 444
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 DB 445 PDCPLIGFIRLDQKGYEIIADAMPWIVSODVOILVILGTRHDIESMLRHPERHHDXV 670
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 QY 787 LYEDVLLKAKYQW 799
 DB 625 QYEQV-----FTW 632

Search completed: June 9, 2005, 13:13:37
 Job time : 48 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 9, 2005, 13:10:14 ; Search time 159 Seconds
(without alignments)
1926.316 Million cell updates/sec

Title: US-10-018-418a-4

Perfect score: 4276

Sequence: 1 MSSAVASASFLALASAPG.....SWEHAATYEDVLKAKYQW 799

Scoring table:

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Gapop 10.0 , Gapext 0.5

Searched: 1710399 seqs, 38334425 residues

1710399

Total number of hits satisfying chosen parameters:

1710399

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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1	4075	95.3	799	9 US-09-952-677-6	Sequence 6, Appl1
2	4075	95.3	799	16 US-10-818-624-6	Sequence 6, Appl1
3	3826.5	89.4	802	16 US-10-416-439C-6	Sequence 6, Appl1
4	3821	89.4	813	16 US-10-416-439C-5	Sequence 5, Appl1
5	3663.5	85.7	770	16 US-10-416-439C-10	Sequence 10, Appl1
6	2811.5	65.8	732	16 US-10-109-048-26	Sequence 26, Appl1
7	2811.5	65.8	732	16 US-10-109-048-462	Sequence 462, App
8	2764.5	64.7	810	16 US-10-437-963-164696	Sequence 164696,
9	2702.5	63.2	670	16 US-10-336-753-51	Sequence 51, Appl1
10	2636.5	61.7	554	16 US-10-425-115-361865	Sequence 361865,
11	2606	60.9	582	16 US-10-416-439C-7	Sequence 7, Appl1

12	2516.5	58.9	641	14 US-10-272-291-8	Sequence 8, Appl1
13	2432	56.9	669	16 US-10-628-525-9	Sequence 9, Appl1
14	2380.5	55.7	694	15 US-10-389-566-797	Sequence 797, App
15	2365.5	55.3	694	15 US-10-389-566-1213	Sequence 1213, Ap
16	2332.5	54.5	698	16 US-10-425-115-334543	Sequence 334543,
17	2314.5	54.1	698	16 US-10-109-048-27	Sequence 27, Appl1
18	2314.5	54.1	698	16 US-10-109-048-677	Sequence 677, Appl
19	2314.5	54.1	698	16 US-10-628-525-11	Sequence 11, Appl
20	2314.5	54.1	804	15 US-10-336-753-49	Sequence 49, Appl
21	2163	50.6	801	14 US-10-044-543-26	Sequence 26, Appl1
22	2161.5	50.5	535	15 US-10-425-114-43176	Sequence 43176, A
23	2161.5	50.5	771	15 US-10-424-599-202586	Sequence 202586,
24	2150.5	50.3	767	14 US-10-284-668-8	Sequence 8, Appl1
25	2069.5	48.4	477	14 US-10-372-291-7	Sequence 7, Appl1
26	2063	48.2	690	14 US-10-044-543-6	Sequence 6, Appl1
27	2059	48.2	558	14 US-10-284-668-6	Sequence 6, Appl1
28	2033	47.5	379	16 US-10-109-048-479	Sequence 479, App
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30	2024	47.3	749	16 US-10-437-963-182627	Sequence 182627,
31	1940	45.4	379	16 US-10-109-048-477	Sequence 477, App
32	1933	45.2	440	15 US-10-425-114-38552	Sequence 38552, A
33	1929	45.1	379	16 US-10-109-048-480	Sequence 480, App
34	1696	39.7	995	16 US-10-437-963-182628	Sequence 182628,
35	1551	36.3	492	16 US-10-109-048-32	Sequence 32, Appl1
36	1455.5	34.0	358	16 US-10-109-048-7	Sequence 7, Appl1
37	1374	32.1	341	15 US-10-425-114-58577	Sequence 58577, A
38	1374	32.1	341	16 US-10-425-115-221864	Sequence 221864,
39	1360.5	31.8	411	16 US-10-109-048-481	Sequence 481, App
40	1360	31.8	361	16 US-10-109-048-8	Sequence 8, Appl1
41	1347	31.5	458	16 US-10-109-048-33	Sequence 33, Appl1
42	1336.5	31.3	350	16 US-10-109-048-476	Sequence 476, App
43	1332.5	31.2	349	16 US-10-109-048-3	Sequence 3, Appl1
44	1330	31.1	348	16 US-10-109-048-475	Sequence 475, Appl
45	1204	28.2	230	16 US-10-416-439C-8	Sequence 8, Appl1

ALIGNMENTS

RESULT 1
US-09-952-677-6
; Sequence 6, Application US/09952677
; Patent No. US20020138676A1
GENERAL INFORMATION:
APPLICANT: Block, Martina
Loitz, Horst
Luticke, Stephanie
Walter, Lennart
Froberg, Claus
Kossmann, Jens
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
FROM WHEAT WHICH ARE INVOLVED IN STARCH
SYNTHESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/952,677
FILING DATE: 14-Sep-2001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/196,390
FILING DATE: 19-No. US20020138676A1-1998
APPLICATION NUMBER: DE 196 21 588.9

FILING DATE: 29-MAY-1996
APPLICATION NUMBER: DE 196 36 917.7
FILING DATE: 11-SEP-1996
APPLICATION NUMBER: PCT/EP97/02793
FILING DATE: 28-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: AGREVO-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 799 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-952-677-6

Query Match 95.3%; Score 4075; DB 9; Length 799;
Best Local Similarity 95.6%; Pred. No. 4.7e-294;
Matches 764; Conservative 7; Mismatches 28; Indels 0; Gaps 0;

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QY 361 GVRKYYKAGODMEVNYFHAVIDGVFIDAPLFRHROEDYIGSGROEIMKRMILFCKA 420
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DB 781 MEHAUKLYEDVILKAKYOW 799

RESULT 2

US-10-818-624-6
Sequence 6, Application US/10818624
Publication No. US20040204579A1
GENERAL INFORMATION:
APPLICANT: Block, Martina
Lortz, Horst
Luticke, Stephanie
Walter, Lennart
Frohberg, Claus
Kossmann, Jens
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
FROM WHEAT WHICH ARE INVOLVED IN STARCH
SYNTHESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/818,624
FILING DATE: 05-Apr-2004
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/952,677
FILING DATE: 14-Sep-2001
APPLICATION NUMBER: 09/196,390
FILING DATE: 19-Nov-1998
APPLICATION NUMBER: DE 196 21 588.9
FILING DATE: 29-MAY-1996
APPLICATION NUMBER: DE 196 36 917.7
FILING DATE: 11-SEP-1996
APPLICATION NUMBER: PCT/EP97/02793
FILING DATE: 28-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: AGREVO-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 799 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-10-818-624-6

Query Match 95.3%; Score 4075; DB 16; Length 799;
Best Local Similarity 95.6%; Pred. No. 4.7e-294;
Matches 764; Conservative 7; Mismatches 28; Indels 0; Gaps 0;

QY 1 MSSAVASAFLALASAPGSRRRARVAPPPHAGAGRLHMPMPORTADGVAARA 60
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RESULT 3

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US-10-416-439C-6
; Sequence 6, Application US/10416439C
; Publication No. US20040199942A1
; GENERAL INFORMATION:
; APPLICANT: Commonwealth Scientific and Industrial Research Organisation
; APPLICANT: Morell, Matthew Kennedy
; APPLICANT: Batey, Ian Leslie
; APPLICANT: Topping, David
; TITLE OF INVENTION: REDUCED AMLOPECTIN CONTENT
; FILE REFERENCE: 0070/70440
; CURRENT APPLICATION NUMBER: US/10/416, 439C
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 802
; TYPE: PRT

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ORGANISM: Hordeum vulgare
US-10-416-439C-6

Query Match 89.5%; Score 3826.5; DB 16; Length 802;
Best Local Similarity 90.0%; Pred. No. 1,46-275;
Matches 730; Conservative 17; Mismatches 43; Indels 21; Gaps 4;

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QY 229 DVEPELKGAIVIEEAPNKAISPPAPAVQEDLMDPKYIGFEEVPEAKDQMAVADDA 288
DB 229 DVEPELKGAIVIEEAPNKAISPPAPAVQEDLMDPKYIGFEEVPEAKDQMAVADDA 288
QY 292 GSFEHHQNDHSLAGENMNVVVAECSPMCKTGGLDVAGALPKALAKRGHRVMVVP 348
DB 292 GSFEHHQNDHSLAGENMNVVVAECSPMCKTGGLDVAGALPKALAKRGHRVMVVP 348
QY 349 PRGYDYEADVGVKRYTAAAGDMENVFHAVIDGVDFVFIAPLFRHROEDYIGSRO 408
DB 349 PRGYDYEADVGVKRYTAAAGDMENVFHAVIDGVDFVFIAPLFRHROEDYIGSRO 408
QY 409 EIMKRMILFCKAIVEVPMHVPCGGVYGGDNLVFINDMHTALLPYTLKAYYRDHGLMQY 468
DB 409 EIMKRMILFCKAIVEVPMHVPCGGVYGGDNLVFINDMHTALLPYTLKAYYRDHGLMQY 468
QY 412 EIMKRMILFCKAIVEVPMHVPCGGVYGGDNLVFINDMHTALLPYTLKAYYRDHGLMQY 471
DB 412 EIMKRMILFCKAIVEVPMHVPCGGVYGGDNLVFINDMHTALLPYTLKAYYRDHGLMQY 471
QY 469 TRSIMVTHIAHOGRGVDEPFTTELPEHYLEHFRLYDPVGEHANYFAAGLKMADOVV 528
DB 469 TRSIMVTHIAHOGRGVDEPFTTELPEHYLEHFRLYDPVGEHANYFAAGLKMADOVV 528
QY 472 SRSVMVTHIAHOGRGVDEPFTTELPEHYLEHFRLYDPVGEHANYFAAGLKMADOVV 531
DB 472 SRSVMVTHIAHOGRGVDEPFTTELPEHYLEHFRLYDPVGEHANYFAAGLKMADOVV 531
QY 529 VSPGYLMELKTVGCGWGLHDIIRONDMKTGIVNGIDNMENBEVDVHLKSDGYTNFSLK 588
DB 529 VSPGYLMELKTVGCGWGLHDIIRONDMKTGIVNGIDNMENBEVDVHLKSDGYTNFSLK 588
QY 589 TLDSGRCKEALORELGLQVADVPLLFPIGRIDGOKVEITADAMPITVSODVOLML 648
DB 589 TLDSGRCKEALORELGLQVADVPLLFPIGRIDGOKVEITADAMPITVSODVOLML 648
QY 649 GTGRHDLBSMLRFEREHNDKRVGWGFSVRLAHRITAGADALLMPSRFBPCGLOLYAM 708
DB 649 GTGRHDLBSMLRFEREHNDKRVGWGFSVRLAHRITAGADALLMPSRFBPCGLOLYAM 708
QY 709 AYGTVPVNAVGVGVRDTPVPDFPNHSGLGMTFDRBAHKLIALGHCILRTYRDYKESWR 768
DB 709 AYGTVPVNAVGVGVRDTPVPDFPNHSGLGMTFDRBAHKLIALGHCILRTYRDYKESWR 768
QY 712 AYGTVPVNAVGVGVRDTPVPDFPNHSGLGMTFDRBAHKLIALGHCILRTYRDYKESWR 771
DB 712 AYGTVPVNAVGVGVRDTPVPDFPNHSGLGMTFDRBAHKLIALGHCILRTYRDYKESWR 771
QY 769 GLOERMSQDFSEHAHKLIEDVLKAKYQW 799
DB 769 GLOERMSQDFSEHAHKLIEDVLKAKYQW 799
QY 772 GLOERMSQDFSEHAHKLIEDVLKAKYQW 802
DB 772 GLOERMSQDFSEHAHKLIEDVLKAKYQW 802

```

RESULT 4

```

US-10-416-439C-5
; Sequence 5, Application US/10416439C
; Publication No. US20040199942A1
; GENERAL INFORMATION:
; APPLICANT: Commonwealth Scientific and Industrial Research Organisation
; APPLICANT: Morell, Matthew Kennedy
; APPLICANT: Batey, Ian Leslie
; APPLICANT: Topping, David

```

;; TITLE OF INVENTION: BARLEY WITH REDUCED SEII ACTIVITY AND STARCH CONTAINING PRODUCTS
;; TITLE OF INVENTION: REDUCED AMYLOPECTIN CONTENT
;; FILE REFERENCE: 0070/70440
;; CURRENT APPLICATION NUMBER: US/10/416,439C
;; CURRENT FILING DATE: 2003-12-05
;; NUMBER OF SEQ ID NOS: 14
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 5
;; LENGTH: 813
;; TYPE: PRT
;; ORGANISM: Hordeum vulgare
US-10-416-439C-5

Query Match 89.4%; Score 3821; DB 16; Length 813;
Best Local Similarity 88.8%; Pred. No. 3.8e-275;

Matches 730; Conservative 17; Mismatches 43; Indels 32; Gaps 4;

```
QY 1 MSSAVASASFLALASAPGR-SRRARVASPPHAGGRLHWPMPPORTARDGVAAAR 59
DB 1 MSSAVASASFLALASAPGRSRRARVASPPHAGGRLHWPMPPORTARDGVAAAR 60
QY 60 AAGKDAVDDDAASARQPRARGAATKVAERDPVTLDDAEGAPAPARODAA 119
DB 61 AAG-----IDDAAGROPARRRYGAATKVA--DPVKTLDDAAEGGSPSPARODAA 111
QY 120 RPPSNMGTPVNGENKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKANAVASPPISI 179
DB 112 RLPSSNGTLINGENKPTGGGATKDSGLPTPARAHLISIQNRVPVNGENKKNVAPPSISI 171
QY 180 AENVAPDSATISISDKAPESVVPAREKP-----PSSGSNFV 217
DB 172 VDVAAPGSANANISINNKVPSSVVPAREKPSSVPAKKTLPSSGSNFVS 231
QY 218 SASARLIDISDVEBELKKGAVIVEAPRPAKLSPPAPAYOEDIMDFKXI GFEEPEVA 277
DB 222 SASARLIDISDVEBELKKGAVIVEAPRPAKLSPPAPAYOEDIMDFKXI GFEEPEVA 291
QY 278 KODGNAVADDAAGSFHHQNHDSGPLAGENVMMVVVAAECSPWCCTGGIGDVAGALPYAL 337
DB 222 KODGSAVADDAAGSFHHQNHDSGPLAGENVMMVVVAAECSPWCCTGGIGDVAGALPYAL 351
QY 338 AKRGHRRVWVPRYGDYEBAYDVGRKTYKKAAGDMEVNYFHAAYIDGVDFVFTDAPLFRH 397
DB 352 AKRGHRRVWVPRYGDYEBAYDVGRKTYKKAAGDMEVNYFHAAYIDGVDFVFTDAPLFRH 411
QY 398 ROEDYIGGSRROEIMRMILFCKAAVEVPMHVCGVPGDGNLVFIANDMHTALLPVYLK 457
DB 412 ROEDYIGGSRROEIMRMILFCKAAVEVPMHVCGVPGDGNLVFIANDMHTALLPVYLK 471
QY 458 AYYRDHGLMOQYTRSIMVJHNIAHQRGVPDEFPTELPEHYLEHFRLYDPVGEHANFYA 517
DB 472 AYYRDHGLMOQYTRSIMVJHNIAHQRGVPDEFPTELPEHYLEHFRLYDPVGEHANFYA 531
QY 518 AGLKXADQVYVVSFGYLMELKTVBEGKGLHDIIRQNDMKTTRGIVNGIDMENNPEVDYHL 577
DB 532 AGLKXADQVYVVSFGYLMELKTVBEGKGLHDIIRQNDMKTTRGIVNGIDMENNPEVDYHL 591
QY 578 KSDGVTNFSIGTLDSGKQCKEALORELGLOVRADVPLLGIFGRDGGKGVFIIDAMPW 637
DB 592 KSDGVTNFSIGTLDSGKQCKEALORELGLOVRADVPLLGIFGRDGGKGVFIIDAMPW 651
QY 638 IYSQDVOLVMLGTGRHDLSEMLRHFEREHNDKVRGNGVSVLARIITAGADALMPSRF 697
DB 652 IYSQDVOLVMLGTGRHDLSEMLRHFEREHNDKVRGNGVSVLARIITAGADALMPSRF 711
QY 698 EPCGILNOLYAMA YGVTPVVAHVGVRDTPVPDPFNHSGLGTFPRAEAKHLIEALGHCL 757
DB 712 EPCGILNOLYAMA YGVTPVVAHVGVRDTPVPDPFNHSGLGTFPRAEAKHLIEALGHCL 771
QY 758 RYYRDKESWRLQERGWSODFSWEHAAKLYEDVLKAKYQM 799
DB 772 RYYRDKESWRLQERGWSODFSWEHAAKLYEDVLKAKYQM 813
```

RESULT 5
US-10-416-439C-10
Sequence 10, Application US/10416439C
Publication No. US20040199942N1

GENERAL INFORMATION:
APPLICANT: Commonwealth Scientific and Industrial Research Organisation
APPLICANT: Morell, Matthew Kennedy
APPLICANT: Batey, Ian Leslie
APPLICANT: Topping, David

;; TITLE OF INVENTION: BARLEY WITH REDUCED SEII ACTIVITY AND STARCH CONTAINING PRODUCTS
;; TITLE OF INVENTION: REDUCED AMYLOPECTIN CONTENT
;; FILE REFERENCE: 0070/70440
;; CURRENT APPLICATION NUMBER: US/10/416,439C
;; CURRENT FILING DATE: 2003-12-05
;; NUMBER OF SEQ ID NOS: 14
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 10
;; LENGTH: 770
;; TYPE: PRT
;; ORGANISM: Hordeum vulgare
US-10-416-439C-10

Query Match 85.7%; Score 3663.5; DB 16; Length 770;
Best Local Similarity 89.1%; Pred. No. 1.8e-263;
Matches 693; Conservative 18; Mismatches 36; Indels 31; Gaps 3;

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QY 44 PMPPORTARDGVAAARAAGKDAVDDDAASARQPRARGAATKVAERDPVTLDDA 103
DB 2 PMPPORTARDGVAAARAAG-----IDDAAGROPARRRYGAATKVA--DPVKTLDDA 52
QY 104 AEGGAPAPARODAAARPPSNMGTPVNGENKSTGGGATKDSGLPAPARAPHPSTONRVP 163
DB 53 AEGGSPSPARODAAARLPSSNGTLINGENKPTGGGATKDSGLPTPARAHLISIQNRVP 112
QY 164 VNGENKANAVASPPISIAENVAPDSATISISDKAPESVVPAREKP----- 208
DB 113 VNGENKKNVAPPSISIVDVASPGSANANISINNKVPSSVVPAREKPSSVPAKKTLPSSV 172
QY 209 -----PSSGSNFVSASARLIDISDVEBELKKGAVIVEAPRPAKLSPPAPAYOED 261
DB 173 VPAAKKTLPSSGSNFVSASARLIDISDVEBELKKGAVIVEAPRPAKLSPPAPAYOED 232
QY 262 LMDFKXI GFEEPEVAEKDQNAVADDAAGSFHHQNHDSGPLAGENVMMVVVAAECSPWC 321
DB 223 LMDFKXI GFEEPEVAEKDQNAVADDAAGSFHHQNHDSGPLAGENVMMVVVAAECSPWC 292
QY 322 KTGGIGDVAGALPKALAKGHRVWVPRYGDYEBAYDVGRKTYKKAAGDMEVNYFHAAY 381
DB 293 KTGGIGDVAGALPKALAKGHRVWVPRYGDYEBAYDVGRKTYKKAAGDMEVNYFHAAY 352
QY 382 IDGVDFVFTDAPLFRHROEDYIGGSRROEIMRMILFCKAAVEVPMHVCGVPGDGNLV 441
DB 412 IDGVDFVFTDAPLFRHROEDYIGGSRROEIMRMILFCKAAVEVPMHVCGVPGDGNLV 471
QY 442 FIANDMHTALLPVYLKAYYRDHGLMOQYTRSIMVJHNIAHQRGVPDEFPTELPEHYLEH 501
DB 472 FIANDMHTALLPVYLKAYYRDHGLMOQYTRSIMVJHNIAHQRGVPDEFPTELPEHYLEH 531
QY 502 FRLYDPVGEHANFYAAGLXADQVYVVSFGYLMELKTVBEGKGLHDIIRQNDMKTTRGIV 561
DB 532 FRLYDPVGEHANFYAAGLXADQVYVVSFGYLMELKTVBEGKGLHDIIRQNDMKTTRGIV 591
QY 562 NGIDMENNPEVDYHLKSDGVTNFSIGTLDSGKQCKEALORELGLOVRADVPLLGIFGR 621
DB 592 NGIDMENNPEVDYHLKSDGVTNFSIGTLDSGKQCKEALORELGLOVRADVPLLGIFGR 651
QY 622 LDGKGVFIIDAMPWIVSODVOLVMLGTGRHDLSEMLRHFEREHNDKVRGNGVSVLARI 681
DB 652 LDGKGVFIIDAMPWIVSODVOLVMLGTGRHDLSEMLRHFEREHNDKVRGNGVSVLARI 711
QY 682 HRTTAGADALMPSRFEPGILNOLYAMA YGVTPVVAHVGVRDTPVPDPFNHSGLGTFP 741
DB 711 HRTTAGADALMPSRFEPGILNOLYAMA YGVTPVVAHVGVRDTPVPDPFNHSGLGTFP 771
```

Db 653 HRTAGADALMPSRFEPCGLNQLYAMAYGRIPVVHAVGGLDTPVFPDPFNHSGLGWTF 712
Qy 742 DRAEHKILIALGHLRTYRDYKESWRGIGQKSGMSQDSMEHAALYEDVLLKAKYQW 799
Db 713 DRAEHKILIALGHLRTYRDYKESWRGIGQKSGMSQDSMEHAALYEDVLLKAKYQW 770

RESULT 6

US-10-109-048-26
; Sequence 26, Application US/10109048
; Publication No. US20040107461A1
; GENERAL INFORMATION:
; APPLICANT: COMMURI, PADMA
; APPLICANT: KEELING, PETER L.
; APPLICANT: RAMIREZ, NONA
; APPLICANT: MCKEAN, ANGELA
; APPLICANT: GAO, ZHONG
; APPLICANT: GUAN, HANPING
; TITLE OF INVENTION: GLUCAN CHAIN LENGTH DOMAINS
; FILE REFERENCE: 2461-76
; CURRENT APPLICATION NUMBER: US/10/109,048
; CURRENT FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: 60/279,720
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 1154
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 732
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: S511a amino acid sequence
US-10-109-048-26

Query Match 65.8%; Score 2811.5; DB 16; Length 732;
Best Local Similarity 68.2%; Pred. No. 4e-200;
Matches 550; Conservative 58; Mismatches 116; Indels 83; Gaps 10;

Qy 1 MSSAVASAS--FLALASAPGSRRRARVSAPPFHAGAG--LHWPWPORTRADCG 55
Db 1 MSSAAVSSSSSTFFLALASAPG--GRRARVGSPPFHGASLFAFWAPSPPRAPRDA 59
Qy 56 V--AARAAKKDARVDDAASAROPRARCGAATVVAERRPVKTLLDADAEGCAPRPA 113
Db 60 LVRAEAEGKADAPERSGDAARLPARRNA---VSKRDPDQ----- 99
Qy 114 PRODARPPSMNGTPVNGENKSTGGGATKOSGLPAPARAPHSQNRVPVNGENKANYA 173
Db 100 -----PVGRYSATGN-----TARTGAASQNALADVEIKSIYA 134
Qy 174 SPTISIAEVAPDSATISIDKAPESVVAPEKPPSSGNSFVVASAPRLDIDSDVEPE 233
Db 135 APTTSIVFPAAGYRMILPSGDIAPETVLPAPKPLHES-----PAVDGDSN---- 180
Qy 234 LKGAIVIEEAPNPALSPPA--PAVQEDLMDFKYITGEFEEPEAKDGMVADDAAGSFE 292
Db 181 -----GIAPTVEPLVQEARATWDFKXYIGFDEDEAKDSSRVGADAGSFE 225
Qy 293 HHONHDSGLAGENVNVAECSPMCKTGGLDVGALPKALAKRGHRVMVVPYRG 352
Db 226 HYGNDSGLPAGENVNVAECSPMCKTGGLDVGALPKALAKRGHRVMVVPYRG 285
Qy 353 DYEAVYDVGRKYKAAQODMEVNYFAHYIDGVDFVFDAPLFRHROBDIYGSROEIMK 412
Db 286 DYVEAFDMGIRKYYKAAQODLEVNYFAHYIDGVDFVFDAPLFRHROBDIYGSROEIMK 345
Qy 413 RMILFCKAAVEVPMPVPCGVPYGDGNLVFIANDHTALLPYLLKAYYRDHGLMYTISI 472
Db 346 RMILFCKAAVEVPMPVPCGVPYGDGNLVFIANDHTALLPYLLKAYYRDHGLMYTISI 405
Qy 473 MVIHIAAGRGVPEFPTTELPEHYLHFRLYDPEVGEHANYFAAGLKMADQVVVSPG 532
Db 406 LVINHIAAGRGVPEFPTTELPEHYLHFRLYDPEVGEHANYFAAGLKMADQVVVSPG 465

Qy 533 YLMELKTVEGGMGJLHDIIRONDWKTGRIVNGIDNMENNPEVDYHLKSDGYNPSLGLTDS 592
Db 466 YLMELKTVEGGMGJLHDIIRONDWKTGRIVNGIDNMENNPEVDYHLKSDGYNPSLGLTDS 525
Qy 593 GKROCKEALQRELEGLQVADYVPLGLFGRLDGQKQVEIADAMPWISQDVLYMLGTGR 652
Db 526 GKROCKEALQRELEGLQVADYVPLGLFGRLDGQKQVEIADAMPWISQDVLYMLGTGR 585
Qy 653 HDLESMLNFEREHHDKRGVNGSVRLAHRITAGADALLMPSRFEPCGLNQLYAMAYGT 712
Db 586 ADLERMLQHLREHPNKNRGVNGSVFVMAHHTITAGADVLLMPSRFEPCGLNQLYAMAYGT 645
Qy 713 VPVYVAVGVADTPVPPDPFNHSGLGWTFDEAABHKLIEALGHCLRTYRDYKESWRGIG 772
Db 646 VPVYVAVGVADTPVPPDPFNHSGLGWTFDEAABHKLIEALGHCLRTYRDYKESWRGIG 705
Qy 773 RQMSQDSMEHAALYEDVLLKAKYQW 799
Db 706 RQMSQDSMEHAALYEDVLLKAKYQW 732

RESULT 7

US-10-109-048-462
; Sequence 462, Application US/10109048
; Publication No. US20040107461A1
; GENERAL INFORMATION:
; APPLICANT: COMMURI, PADMA
; APPLICANT: KEELING, PETER L.
; APPLICANT: RAMIREZ, NONA
; APPLICANT: MCKEAN, ANGELA
; APPLICANT: GAO, ZHONG
; APPLICANT: GUAN, HANPING
; TITLE OF INVENTION: GLUCAN CHAIN LENGTH DOMAINS
; FILE REFERENCE: 2461-76
; CURRENT APPLICATION NUMBER: US/10/109,048
; CURRENT FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: 60/279,720
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 1154
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 462
; LENGTH: 732
; TYPE: PRT
; ORGANISM: Zea mays
US-10-109-048-462

Query Match 65.8%; Score 2811.5; DB 16; Length 732;
Best Local Similarity 68.2%; Pred. No. 4e-200;
Matches 550; Conservative 58; Mismatches 116; Indels 83; Gaps 10;

Qy 1 MSSAVASAS--FLALASAPGSRRRARVSAPPFHAGAG--LHWPWPORTRADCG 55
Db 1 MSSAAVSSSSSTFFLALASAPG--GRRARVGSPPFHGASLFAFWAPSPPRAPRDA 59
Qy 56 V--AARAAKKDARVDDAASAROPRARCGAATVVAERRPVKTLLDADAEGCAPRPA 113
Db 60 LVRAEAEGKADAPERSGDAARLPARRNA---VSKRDPDQ----- 99
Qy 114 PRODARPPSMNGTPVNGENKSTGGGATKOSGLPAPARAPHSQNRVPVNGENKANYA 173
Db 100 -----PVGRYSATGN-----TARTGAASQNALADVEIKSIYA 134
Qy 174 SPTISIAEVAPDSATISIDKAPESVVAPEKPPSSGNSFVVASAPRLDIDSDVEPE 233
Db 135 APTTSIVFPAAGYRMILPSGDIAPETVLPAPKPLHES-----PAVDGDSN---- 180
Qy 234 LKGAIVIEEAPNPALSPPA--PAVQEDLMDFKYITGEFEEPEAKDGMVADDAAGSFE 292
Db 181 -----GIAPTVEPLVQEARATWDFKXYIGFDEDEAKDSSRVGADAGSFE 225
Qy 293 HHONHDSGLAGENVNVAECSPMCKTGGLDVGALPKALAKRGHRVMVVPYRG 352
Db 406 LVINHIAAGRGVPEFPTTELPEHYLHFRLYDPEVGEHANYFAAGLKMADQVVVSPG 465

Db 226 HYGDNDSCPLAGENNWNVIVAAECSPWCKTGIGLVGALPKALARRGHRVWVVPRYX 285
Qy 353 DYEBAVDGVRRKYKKAAGDMENVYFHAITDGVDFVFIAPLFRHROEDITYGSSROEIMK 412
Db 286 DYEABDMGIRKITYKKAAGDLEVNYPHATIDGVDFVFIAPLFRHRODDITYGSSROEIMK 345
Qy 413 RMILFCKAAVEVPMHVPCCGVPYGDNLVFIANDMHTALLPVYLKAYYRDHGLMOYTRSI 472
Db 346 RMILFCKAAVEVPMHVPCCGVCYGDNLVFIANDMHTALLPVYLKAYYRDHGLMOYTRSV 405
Qy 473 MYIHNTAHQGRGVPDEFPTTELEPHYLEHRLYDPRVGSBHANYFAAGLKMAQDVVVVSG 532
Db 406 LVYIHNTAHQGRGVPDEFPTTELEPHYLEHRLYDPRVGSBHANIYFAAGLKMAQDVVVVSG 465
Qy 533 YIMELKTVEGGWGLHDIIRQNDMKTRGIYNGIDNMENPEVDYHLSKSDYTNPSLGTLS 592
Db 466 YIMELKTVEGGWGLHDIIRSNBCKINGIVNGIDHQBENPVDYHLSKSDGTYNLSLTLA 525
Qy 593 GKROCKEALQRELGIOVRADVPLIGFIRLDGQKVEIITADAMPWIVSODVOLVMLGTGR 652
Db 526 GKROCKEALQRELGILEVRDVPILGFIIRLDGQKVDIIGDAMPWIAQDVOLVMLGTGR 585
Qy 653 HDLESMLRPEREHHDKVRGWGFSVRLAHRITAGADALLMPRFPCCGLNOLYMAAYGT 712
Db 586 ADLERMLQHLERHPKVRGWGFSVPMARITAGADVLVMPSPFCGLNOLYMAAYGT 645
Qy 713 VDVVHAVGVGVRDVPFPDPPNHSGLGWTDRABAHKLEALGICLTARYDYKESWMLQGE 772
Db 646 VDVVHAVGVGVRDVPFPDPPGADGLGWTDRABANKLIEALHCLDTYKKGESWMLQGE 705
Qy 773 RGMSPDSWEHAKLYEDVILKAKYQW 799
Db 706 RGMSPDLSMDHAELYEVDVILKAKYQW 732

RESULT 8

US-10-437-963-164696
; Sequence 164696, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 164696
; LENGTH: 810
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_63571C.1.pep
; US-10-437-963-164696

Query Match 64.7%; Score 2764.5; DB 16; Length 810;
Best Local Similarity 66.4%; Pred. No. 1,4e-196;
Matches 555; Conservative 75; Mismatches 143; Indels 63; Gaps 20;
Qy 1 MSSA-VASASFL-ALASAPGSRRRAR---VSADPP-----HAGAGRLHMPMP-POR 49
Db 1 MSSAVASSTTFLVALASSASRGPRRGVGAAPALLYDGRAGRLALRAPPPRRPP 60
Qy 50 TARDGVAAARA-AGKRDARY---DD------AASARQPRARRGGAATKYAERRDPVK 97
Db 61 RRRDAGVVRADDGENEAAVERAGEDDEEEFFSGAMQPPRSRRGGVG-KYLKRRGTVP 119

Qy 98 TLDR-----DAAE-GGAPAP-PAPRODAPRPSNMGTVPNGENKSTGGGATKDSGLPAP 150
Db 120 PYGIRYGGSGDAAARVGAAPAPAPOTDAA--SSKRGALLSGRDDT----- 163
Qy 151 ARAHPSTONRVVNGENKANAAPPTSTIAEVVAPDSAAITSI SDK-ADESVP-AEKP- 207
Db 164 -----PASRNGSVVTGADPAPATPPVITTKLPADSPILPSVKKPQEEFYI PDATABA 218
Qy 208 PSSGSGNPFVGSASARLDDSDVEPELKKGAIVYEAPRPKLSPAPAVOEDLMDPEK 267
Db 219 PPPPSNPPSSAPLKPDPDSEFAP--DSSAIVVSAPPKYTRSSPIPAVEEETWDFEK 275
Qy 268 YIGFEEPEYAK-----DDGVAVADDAGSEFHQNHQSGPLAGENNWNVIVAAECSPWCKT 323
Db 276 YFDLNEPDAEEDDDDDMA--DSDSASEIDDDDSGLAGENNWNVIVAAECSPWCKT 334
Qy 324 GGLGADVAGALPKALARKGHRVWVPRYGDYEAADVGRKYYKKAAGDMENVYFHAITD 383
Db 335 GGLGADVAGALPKALARRGHRVWVPRYGDYEAADVGRKYYKKAAGDLEVKYFHAITD 394
Qy 384 GYDFVFIAPLFRHROEDITYGSSROEIMKRMILFCKAAVEVPMHVPCCGVPYGDNLVFI 443
Db 395 GYDFVFIAPLFRHRODDITYGGRQEIIMKRMILFCKAAVEVPMHVPCCGVPYGDNLVFI 454
Qy 444 ANDMHTALLPVYLKAYYRDHGLMOYTRSIIMVTHNTAHQGRGVPDEFPTTELEPHYLEHPR 503
Db 455 ANDMHTALLPVYLKAYYRDNGMOYTRSVLVHNTAHQGRGVPDEFPTTELEPHYLDHDK 514
Qy 504 LYDPVGEHANYFAAGLKMAQDVVVSPGYIMELKTVEGGWGLHDIIRQNDMKTRGIYNG 563
Db 515 LYDPVGEHANYFAGALKMAQDVVVSPGYIMELKTTEGGWGLHDIIRQNDMKTRGIYNG 574
Qy 564 IDNMENPEVDYHLSKSDGTYNLSLGTDSGKQCKEALQRELGIOVRADVPLIGFIRLD 623
Db 575 IDYREMNPEVDYHLSKSDGTYNLSLGTDSGKQCKEALQRELGILEVRDVPILGFIIRLD 634
Qy 624 GQKGEIITADAMPWIVSODVOLVMLGTGRHDESMLRPEREHHDKVRGWGFSVRLAHR 683
Db 635 GQKGEIITADAMPWIAQDVOLVILGSGRRDLEWMLQREAHQNSKVRGWGFSVPMAR 694
Qy 684 ITAGADALLMPRFPCCGLNOLYMAAYGTPVVAHVGVGVRDVPFPDPPNHSGLGWTEDR 743
Db 695 ITAGADVLVMPSPFCGLNOLYMAAYGTPVVAHVGVGVRDVPFPDPPEDTGLGWTEDR 754
Qy 744 AEAHKLIEALGICLTARYDYKESWMLQGEHNSOPSWHAKLYEDVILKAKYQW 799
Db 755 AEPHKLIEALGICLTARYKESWMLQGEHNSODLSMDHAELYEVDVILKAKYQW 810

RESULT 9

US-10-336-753-51
; Sequence 51, Application US/10336753
; Publication No. US20030226176A1
; GENERAL INFORMATION:
; APPLICANT: Guan, Hanning
; APPLICANT: Keeling, Peter L.
; TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN
; TITLE OF INVENTION: HOSTS
; FILE REFERENCE: 2461-52
; CURRENT APPLICATION NUMBER: US/10/336,753
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/09/402,254
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/06660
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/042,939
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 51
; LENGTH: 670
; TYPE: PRT

```

RESULT 10
US-10-425-115-161865
: Sequence 361865, Application US/10425115
: Publication No. US20040214272A1
: GENERAL INFORMATION:
: APPLICANT: La Rosa, Thomas J.
: APPLICANT: Kovalic, David K.
: APPLICANT: Zhou, Yihua
: APPLICANT: Cao, Yongwei
: TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
: TITLE OF INVENTION: Plants
: FILE REFERENCE: 38-21(53222) B
: CURRENT APPLICATION NUMBER: US/10/425, 115

```

RESULT 11
US-10-416-439C-7
Sequence 7, Application US/10416439C
Publication No. US20040199942A1
GENERAL INFORMATION:
APPLICANT: Commonwealth Scientific and Industrial Research Organisation
APPLICANT: Morell, Matthew Kennedy
APPLICANT: Batey, Ian Leslie
APPLICANT: Topping, David
TITLE OF INVENTION: BARLEY WITH REDUCED SSII ACTIVITY AND STARCH CONTAINING PRODUCTS
TITLE OF INVENTION: REDUCED AMYLOPECTIN CONTENT
FILE REFERENCE: 0070/70440
CURRENT APPLICATION NUMBER: US/10/416,439C
CURRENT FILING DATE: 2003-12-05

NUMBER OF SEQ ID NOS: 14
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 582
TYPE: PRT
ORGANISM: Hordeum vulgare
US-10-416-439C-7

Query Match 60.9%; Score 2606; DB 16; Length 582;
Best Local Similarity 85.8%; Pred. No. 5.7e-185;
Matches 507; Conservative 11; Mismatches 41; Indels 32; Gaps 4;

QY 1 MSSAVASAFSLALASAFGR-SRRARVSAPPHAGAGRLHMPWPORPTARDGVAAAR 59
DB 1 MSSAVASAFSLALASAFGRSSRRARVGSFTRAGAGRLQWRPSLQRTARDGVAAAR 60
QY 60 AAGKARVDDDAASAQPARREGAATKAERDPVKTLDRAEGGAPAPAPRODAA 119
DB 61 AAG-----IDDAAPGRQPARRRYGAATKYA---DPVKTLDRAEGGGSPPAPRODAA 111
QY 120 RPPSMNGTPVNGENKSTGGGATKDSGLPAPAPHPSTQNRVPVNGENKANYASPTST 179
DB 112 RLSPKNGSTLNGENKPTGGGATKDSGLPTPARAPHLSTQNRVPVNGENKANYASPTST 171
QY 180 AEVAPDAAATISISDKAPESVPAEKPP-----PSSGSNFV 217
DB 172 VDVAAPSAANISISNKPSPSVPAKKTTPSSVPAKKAPESSVPAKKTLPSSGSNFVS 231
QY 218 SASAPRLDIDSVEPELKGAIVYEAPNPKALSPPAPAVQEDLWPKYIGFEEVEEA 277
DB 232 SASAPRLDIDSVEPELKGAIVYEAPNPKALSPPAPAVQEDLWPKYIGFEEVEEA 291
QY 278 KDDQMAVADAGSEFHHQNDHSGPLAGBNVNVVVAECSPMCKTGGLDVGALPKAL 337
DB 292 KDDQSAVADAGSEFHHQNDHSGPLAGBNVNVVVAECSPMCKTGGLDVGALPKAL 351
QY 338 AKRGHRVWVVPVPRGYDEEAVDVGVRRYKYKAAGDMENVFHAAYIDGVFIDAPLFRH 397
DB 352 AKRGHRVWVVPVPRGYDEEAVDVGVRRYKYKAAGDMENVFHAAYIDGVFIDAPLFRH 411
QY 398 ROEDTYGSGROELMKRMILFEKKAVEVPMVPCGVYVGGDNLVFIANDWHTALLPYTLK 457
DB 412 ROEDTYGSGROELMKRMILFEKKAVEVPMVPCGVYVGGDNLVFIANDWHTALLPYTLK 471
QY 458 AYVRDHGLMOYTRSIWYTHINIAHQGRGVPEFPTLPEHYLBEHRLYDVPVGEHANYFA 517
DB 472 AYVRDHGLMOYTRSIWYTHINIAHQGRGVPEFPTLPEHYLBEHRLYDVPVGEHANYFA 531
QY 518 AGLMADQVVVSPGYLMELKTVEGGLHDIIKQNDMKTGIVNGIDNME 568
DB 532 AGLMADQVVVSPGYLMELKTVEGGLHDIIKQNDMKTGIVNGIDNME 582

RESULT 12
US-10-272-291-8
Sequence 8, Application US/10272291
Publication No. US20030150023A1
GENERAL INFORMATION:
APPLICANT: Exseed Genetics
TITLE OF INVENTION: Starch
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/272,291
CURRENT FILING DATE: 2002-10-17
PRIOR APPLICATION NUMBER: 60/329,525
PRIOR FILING DATE: 2001-10-01
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 8
LENGTH: 641
TYPE: PRT
ORGANISM: Zea mays
FEATURE:
OTHER INFORMATION: Starch Synthase Iia (SSIIa)

US-10-272-291-8
Query Match 58.9%; Score 2516.5; DB 14; Length 641;
Best Local Similarity 66.2%; Pred. No. 2.9e-178;
Matches 493; Conservative 54; Mismatches 93; Indels 105; Gaps 8;

QY 56 VAAAGKKDARVDDDAASAQPARREGAATKYAERDPVKTLDRAEGGAPAPAPR 115
DB 1 MAEAEAGKQDAPERSGDAAARLPARRNA-----VSKRRDPLQ----- 38
QY 116 QDAAPPSNMGTVPNGENKSTGGGATKDSGLPAPAPHPSTQNRVPVNGENKANYASP 175
DB 39 -----PVGYGSATGN-----TARTGAASQONALADVEIKSIVAAP 75
QY 176 PFSIAEVAPDAAATISISDKAPESVPAEKPPSSGSNFVSAAPRLDIDSVEPELK 235
DB 76 PFSIAEVAPDAAATISISDKAPESVPAEKPPSSGSNFVSAAPRLDIDSVEPELK 119
QY 236 KGAIVYEAPNPKALSPPAPAVQEDLWPKYIGFEEVEAKDDGMAVADAGSEFHH 294
DB 120 -----GIAFPTEPLVQEAATWDFKXYIGFDEPDEAKDSSRVGADAGSEFHH 166
QY 295 QNHDSGPLAGBNVNVVVAECSPMCKTGGLDVGALPKALAKRGHRVWVVPVPRGYD 354
DB 167 GNDHSGPLAGBNVNVVVAECSPMCKTGGLDVGALPKALAKRGHRVWVVPVPRGYD 226
QY 355 EEAVDGVRRYKYKAAGDMENVFHAAYIDGVDPVFIIDAPLFRHROEDTYGSGROELMKRM 414
DB 227 VEAAPDGVRRYKYKAAGDMENVFHAAYIDGVDPVFIIDAPLFRHROEDTYGSGROELMKRM 286
QY 415 ILFEKKAVEVPMVPCGVYVGGDNLVFIANDWHTALLPYTLKAYVRDHGLMOYTRSIW 474
DB 287 IL-----GVCYGDGNLVFIANDWHTALLPYTLKAYVRDHGLMOYTRSIW 331
QY 475 INHIAHQGRGVPEFPTLPEHYLBEHRLYDVPVGEHANYFAAGLMADQVVVSPGYL 534
DB 332 INHIAHQGRGVPEFPTLPEHYLBEHRLYDVPVGEHANYFAAGLMADQVVVSPGYL 391
QY 535 WEKTYGSGGLHDIIKQNDMKTGIVNGIDNMEKPEVDVHLKSDGYNFSIGTLDGSK 594
DB 392 WEKTYGSGGLHDIIKQNDMKTGIVNGIDNMEKPEVDVHLKSDGYNFSIGTLDGSK 451
QY 595 ROCKEALQRELGQVADVPLGLFIRLDQKQVEIADAMPVIVSODVOLVNLGTRHD 654
DB 452 ROCKEALQRELGQVADVPLGLFIRLDQKQVEIADAMPVIVSODVOLVNLGTRHD 511
QY 655 LBSMLHFEREHHDKTRGVGESVRLAHRITAGADALLPSRPECGNLQLYMAAYGTVP 714
DB 512 LBSMLHFEREHHDKTRGVGESVRLAHRITAGADALLPSRPECGNLQLYMAAYGTVP 571
QY 715 VVAAGGVRRTPPFPFNHSGLGWTFDRAEHLKLEALGHCLRTYRDYKESVRGLOERG 774
DB 572 VVAAGGVRRTPPFPFNHSGLGWTFDRAEHLKLEALGHCLRTYRDYKESVRGLOERG 616

RESULT 13
US-10-628-525-9
Sequence 9, Application US/10628525
Publication No. US20040185114A1
GENERAL INFORMATION:
APPLICANT: Keeling, Peter
TITLE OF INVENTION: Starch Encapsulation
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Greenlee, Winner and Sullivan, P.C.
STREET: 5370 Manhattan Circle
CITY: Boulder
STATE: CO

COUNTRY: US
ZIP: 80303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/628,525
FILING DATE: 28-JUL-2003
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/941,445
FILING DATE: 30-SEP-1997
APPLICATION NUMBER: US 60/026,855
FILING DATE: 30-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Wanner, Ellen P
REGISTRATION NUMBER: 28,547
REFERENCE/DOCKET NUMBER: 89-97
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 499-8080
TELEFAX: (303) 499-8080
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 669 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-10-628-525-9

Query Match 56.9%; Score 2432; DB 16; Length 669;
Best Local Similarity 65.0%; Pred. No. 6e-172;
Matches 486; Conservative 58; Mismatches 120; Indels 84; Gaps 12;

57 AARAGKKDARVDDDAASARQPARRGGAATKVAERDPVKTLDRAAEGGAPAPAPARQ 116
1 AEAAGGKDAPPPSSGDAARLPAPARNA---VSKRRDPLQ----- 37
117 DAARPPSMNGTPVNGENKSTGGGATKDSGLPAPAPAPHPSTQNRVPVN---GENKANVA 173
38 -----PVGKRYGATGN-----TARTGAASCONAALADVEIIEKSIYA 75
174 SPTSLIAEVAPDAAATISIDKAPESVVPKPPSSGSNFVVSASAPRLDIDSVEPE 233
76 APPTSIYKFPGRGLDDPSLWDIAPEYLPAPKPLHES-----PAVDGDSN---- 121
234 LKKGAVIVEAPNPKALSPPA--PAYOEDLMDFFKTYIGFEERPEAKDDGMAVADAGSFE 292
122 -----GLAPTVPEPLVDEATWDFPKTYIGFDEPDEAKDSSRVGADDAAGSFE 166
293 HHQNDSGPLAGENVVNVVAAECSPWCKTGGLGDVAGALPKALAKRGHRVMVVPVRYG 352
167 HYGMIIG-LCGENVVNVIVVAAECSPWCKTGGLGDVAGALPKALAKRGHRVMVVPVRYG 225
353 DYBAAYDVGRKTKYKKAAGQDMENVYFPAAYIDGVDFIDAPLFRRROEDITYGSSROEIMK 412
226 DYBAFPMGIRKYYKKAAGQDLENVYFPAFIDGVDFVFIAS-FRRRODIDYGSROEIMK 284
413 RMILFCRAAVEPMPHVPCCGVYVGDGNLVFIANDMHTALLPVYLKAYYRHDGLMQYRSI 472
285 RMILFCRAAVEPMPHVPCCGVYVGDGNLVFIANDMHTALLPVYLKAYYRHDGLMQYRSV 344
473 MVINIIAHOGRGPVDEFPTELPEHYLEHFRLYDPVSGEHANYFAA-GLKAAADVVVVSF 531
345 LVINIIHIGORGPVHEFPYMDLNTNLQHFLYDPVSGEHANIFAACVLKAAADVIVYSR 404
532 GYLWELKTVEGKGLHDIIRONDKTKRGITVNGIINEMKNPEVDVHLKSDGTYTNSLGLTD 591
405 GYLWELKTVEGKGLHDIIRSNWDKINGIRERIDHOENPKVDVHLSDGTYTNSLGLTD 464
592 SGKRGCKEALQRELGLQVRADVPLLGIFGRLDGKGVEIADANPMWIVSQDVQLVMLGTG 651

465 AGKRGCKEALQRELGLQVRADVPLLGIFGRLDGKGVDIIGDANPMWIVSQDVQLVMLGTG 524
652 RHIESMLRHEERHNDKRGWGFSVRLAHRITAGDALIMBERFECGINQIYAAAYG 711
525 PPDLEERMLQHLREHPKRVGWFVSYLWVIRITPGASVLYWPSRFAG-GINQIYAAAYG 583
712 TVPVHAHVGVRODVPPEPDPNNSGLGWTDFRAHKLIEALGHCLTYRDPYKESWRLQ 771
584 TVPVHAHVGVRODVPPEPDPNNSGLGWTDFRAHKLIEALGHCLTYRDPYKESWRLQ 643
772 ERGMSODFSMEHAALYEDVLLKAKYOM 799
644 ARGMSQVLSMDHAALYEDVLYV--KYOM 669

RESULT 14
US-10-389-566-797
Sequence 797, Application US/10389566
Publication No. US20040025202A1
GENERAL INFORMATION:
APPLICANT: Monsanto Technology, LLC
APPLICANT: Laurie, Cathy C
TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
FILE REFERENCE: 38-77(529001D)
CURRENT APPLICATION NUMBER: US/10/389,566
CURRENT FILING DATE: 2003-03-31
PRIOR APPLICATION NUMBER: US 60/365,301
PRIOR FILING DATE: 2002-03-15
PRIOR APPLICATION NUMBER: US 60/391,786
PRIOR FILING DATE: 2002-06-25
PRIOR APPLICATION NUMBER: US 60/392,018
PRIOR FILING DATE: 2002-06-26
NUMBER OF SEQ ID NOS: 2459
SOFTWARE: PatentIn version 3.2
SEQ ID NO 797
LENGTH: 694
TYPE: PRT
ORGANISM: Oryza sativa
US-10-389-566-797

Query Match 55.7%; Score 2380.5; DB 15; Length 694;
Best Local Similarity 59.2%; Pred. No. 4.3e-168;
Matches 478; Conservative 79; Mismatches 129; Indels 121; Gaps 15;

1 MSSAVAS---AASFLALASAPGSSRRRARVSAPPH--AGAG-RLHWPMPQRTARDG 54
1 MSGAIASSPATLFLAGSSSSSPR-RRSRVSGVMWHLYGCTGLRLH---WERRGLVRDG 56
55 GV--AARAGKKDARVDDDAASARQPARRGGAATKVAERDPVKTLDRAAEGGAPAP 112
57 AAVCSASAGG---EDGVAKAK-----TKSA----- 79
113 APRQDARPPSMNGTPVNGENKSTGGGATKDSGLPAPAPAPHPSTQNRVPVNGENKANV 172
80 -----GSSKAVAVGST-----AKADHYE-----DS 100
173 ASPTSLIAEVAPDAAATISIDKAPESVVPKPPSSGSNFVVSASAPRLDIDSVEPE 232
101 VSPSKYKPAVAKQNGEVS---RATKSDAPVSKPK-----VDSVPASKEAD--- 146
233 ELKKGAVIVEAPNPKALSPPAAPAVOEDLMDFFKTYIGFEERPEAKDDGMAVADAGSFE 292
147 -----GNAQVESKALDKED-----VGVAEPLKAKADAGDAGAVSSAD 187
293 HHQNDSGPLAGENVVNVVAAECSPWCKTGGLGDVAGALPKALAKRGHRVMVVPVRYG 352
188 DSENKESGPLAGENVVNVVAAECSPWCKTGGLGDVAGALPKALAKRGHRVMVVPVRYG 247
353 DYBAAYDVGRKTKYKKAAGQDMENVYFPAAYIDGVDFIDAPLFRRROEDITYGSSROEIMK 412
248 EYAEAKDLGVKRRYRVAGQDSSEVSFPAFIDGVDFVLBAFPFRHRNDIYGGRRFDVLK 307

Qy	413	MIIECKAAVEPMHPCGGVYRGONLVEIANDMHTALLPYLKAUYRDHGMQYTRSI	472
Dp	308	KMILFCKAAVEVPMAPCGGSIYGDENLVIANDMHTALLPYLKAUYRDNGMQYTRSI	367
Qy	473	MVINHIAHQGRPVDEFPETELPEHYLEHFRLYDVPGECHANYFAAGLKMADQVVVSDQ	532
Dp	368	LYIHNIAMQGRPVDFPATMDLPEHIXIDHFRLYDVPGEHSHNVFAAGLKMADRAVYVSHS	427
Qy	533	YLMEIKLYBGGWGLHDIIIRQMDKTRGIYNGIDNNEWNPBVNHLKSDGYTNSLGTDS	592
Dp	428	YLMEIKTMDGGGHEIILNHNDMKLQGIYNGIDNMEWNPBVNHLQSDGYANTPELTDT	487
Qy	593	GKQCKEALORELGIQVRADEVLLRGTLGDLQCKGVEIITADMPWTVSDQVUUYMLGTR	652
Dp	488	GKQCKEALQORLGIQVRODVPILGTLGDLQCKGVDIITGDAMPWTAGDQVUUYMLGTGR	547
Qy	653	HDLESMLHFEREHNDKYRGWGFVSURLAHRTITAGADALLMPSRFPCGILQLYAMAAYGT	712
Dp	548	PDLEMLKRFBSBHNDKXRGWGFVSQLANHRTITAGADVLLMBSRFPCGILQLYAMAAYGT	607
Qy	713	VPVVAHVAGVRDTPPDPDFNHSGLGWTFDRAEANKLIALGHLGLTYRDYKESWGLQE	772
Dp	608	VPVVAHVAGLRDTVAPDPDFADPTGLGWTFDRAEANKMIDALGHLTNTYRNKESWGLQ	667
Qy	773	RGMSDPFSMEHAKEYEDVYLKAKYQW	799
Dp	668	RGMADLSDMHAELYEDVYLKAKYQW	694

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RESULT 15
US-10-389-566-1213
; Sequence 1213, Application US/10389566
; Publication No. US20040025202A1
; GENERAL INFORMATION:
; APPLICANT: Monsanto Technology, LLC
; APPLICANT: Laurie, Cathy C
; TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
; FILE REFERENCE: 38-77(52900)D
; CURRENT APPLICATION NUMBER: US/10/389,566
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/365,301
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION NUMBER: US 60/391,786
; PRIOR FILING DATE: 2002-06-25
; PRIOR APPLICATION NUMBER: US 60/392,018
; PRIOR FILING DATE: 2002-06-26
; NUMBER OF SEQ ID NOS: 2459
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1213
; LENGTH: 694
; TYPE: PRT
; ORGANISM: Oryza sativa
US-10-389-566-1213

```

Query Match	55.3%	Score 2365.5	DB 15	Length 694
Best Local Similarity	59.0%	Pred. No. 5.6e-167		
Matches	476	Conservative	79	Mismatches 131
			Indels 121	Gaps 15
Qy	1	MSSAVAS---	AA\$F\$T\$A\$S\$P\$G\$R\$R\$R\$P\$A\$V\$P\$P\$H---	AGAG-RLHMPWP\$P\$ORTA\$D\$ 54
Db	1	MSGAI\$SP\$P\$AT\$T\$L\$F\$LAG\$SS\$S\$P\$R-	RR\$R\$S\$R\$V\$G\$W\$M\$H\$Y\$G\$G\$T\$G\$T\$R\$H---	WER\$G\$T\$V\$R\$D\$G 56
Qy	55	GV--AA\$R\$A\$G\$K\$K\$D\$A\$V\$D\$D\$D\$A\$S\$A\$R\$P\$R\$P\$A\$R\$G\$A\$T\$K\$V\$A\$E\$R\$P\$V\$T\$L\$D\$R\$D\$A\$E\$G\$A\$P\$A\$P\$ 112		
Db	57	AVVCSASASAG---	ED\$G\$V\$A\$A\$K---	TK\$A----- 79
Qy	113	AP\$R\$O\$D\$A\$P\$P\$M\$N\$G\$T\$P\$V\$N\$G\$E\$N\$K\$T\$G\$G\$A\$T\$K\$D\$G\$I\$P\$A\$P\$A\$R\$P\$P\$T\$Q\$N\$R\$P\$V\$N\$G\$E\$N\$K\$A\$N\$V 172		
Db	80	-----	G\$S\$K\$A\$V\$A\$V\$Q\$S\$T-----	AK\$D\$H\$V\$E-----D\$S 100
Qy	173	AS\$P\$P\$T\$S\$E\$V\$V\$A\$P\$D\$S\$A\$A\$T\$T\$S\$T\$S\$D\$K\$A\$P\$E\$S\$V\$P\$A\$E\$K\$P\$P\$S\$G\$S\$N\$F\$V\$T\$S\$A\$G\$A\$P\$R\$D\$D\$S\$Y\$E\$P 232		
Db	101	V\$S\$P\$P\$Y\$V\$P\$A\$A\$K\$Q\$N\$G\$E\$V\$S\$--	R\$A\$T\$K\$D\$A\$P\$V\$S\$K\$E\$K-----	V\$D\$P\$S\$V\$P\$S\$K\$E\$A\$D\$-- 146

```

QY 223 ELKKGAIVVEEARNPKALSPRAPAVOEDJWPFKKYIGEEVEEAKDCDCAVADDAAGSE 292
Db 147 -----GNAQAVESKALDDKBE-----VGAEPLEAAGADGGDAGAVSSD 187
QY 293 HHONHDSGPLAGENMNTVVVAAECSPMCCTGGLDVGALPKALAKGRVWVVPRYG 352
Db 188 DSENKESGPLAGPNVWVVI VVAECSPPCKTGGLDVGALPKALARHRVWVVI PRYG 247
QY 353 DYEAAVDGVRKYKKAAGODMEVNYFHAVIDGVFVFI DAPLFRHRQEDI YGGSROETNK 412
Db 248 EYAEAKDGVRRKYRVAGODSEVSFYHAFIDVDVFEFLAEPFRHRNDI YGGEREDVLK 307
QY 413 RMILPFCKAAVEPMVPMPCGGVPGVPGGNVETINDMHTALLPYLTKAYYDHLMOYTRSI 472
Db 308 RMILPFCKAAVEPMVPAFCGGSYGGGNVETINDMHTALLPYCLAKAYYDNGIMQYTRSI 367
QY 473 MVINHIAQGRPVDEPFETTELPERHYLEHFRLYDVGGEHANVFAAGLKMADQVVVSEB 532
Db 368 LVINHIAQGRPVDFATMDLPEHYIDHFRLYDVGGEHSNVFAAGLKMADRAVYVSHG 427
QY 533 YLWELKTVEGGWGLHDIIRONDWKTRGIVNGIDNMEKNPEVDVHLKSDGYTNPSLTJDS 592
Db 428 YLWELKTMDGGGLHEIIRNHNDMKLQGIIVNGIDMAEMNPEVDENHLOSDEYANYTFETLDT 487
QY 593 GKQCKEALQRELGIOVRADVPILGFIGRIDQCKVEITADAMPVISOVDOLNMGTR 652
Db 488 GKQCKEALQROLGIOVRDVPILGFIQGLDHQKVEDIIGDMPMVAQODVDDVNLGTR 547
QY 653 HDLESMLHFEREHNDKXRGWVGSVRLAHRITTAGADALIMPSPREPCINOLYMAAYGT 712
Db 548 PDLSEMLRFRSEHNDDKXRGWVGSVOLAHRITTAGADVLNMSRPREPCINOLYMAAYST 607
QY 713 VPVVHVAVGVDTPVDFDPFNHSGLGWTFDRAEAKLIEALGHCLTRYDYKESNRGLQ 772
Db 608 VPVVHVAVGGLRDTVPDFDPFADTGLGTFEDRAENRMDIALGHCLINTYNYKESNRGLQ 667
QY 773 RGMQDPSFWEHRAKLYEDVLKAKQW 799
Db 668 RGMADLSWMDHAELYEDVLVAKQW 694

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Search completed: June 9, 2005, 13:25:34
Job time : 164 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 10, 2005, 19:11:49 ; Search time 464 Seconds
(without alignments)
10022.195 Million cell updates/sec

Title: US-10-018-418a-3

Perfect score: 2842
Sequence: 1 gctgcaccaccctcgctg.....aaaaaaaaaaaaaaaaaa 2842

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Maximum Match 0%

Listing first 45 summaries

Database :

Issued Patents NA: *
1: /cgn2_6/prodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/prodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/prodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/prodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/prodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/prodata/1/ina/Backfile1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	2392.2	84.2	2825 3 US-09-196-390-5	Sequence 5, Appl1
2	2392.2	84.2	2825 4 US-09-352-677-5	Sequence 5, Appl1
3	1246	43.8	2248 3 US-09-345-214-20	Sequence 20, Appl1
4	1246	43.8	2248 4 US-09-743-980-20	Sequence 20, Appl1
5	1245.2	43.8	1798 3 US-09-345-214-16	Sequence 16, Appl1
6	1245.2	43.8	1798 4 US-09-743-980-16	Sequence 16, Appl1
7	1245.2	43.8	2019 3 US-09-345-214-15	Sequence 15, Appl1
8	1245.2	43.8	2019 4 US-09-743-980-15	Sequence 15, Appl1
9	1104.6	38.9	2007 3 US-08-941-445A-8	Sequence 8, Appl1
10	1104.6	38.9	2007 4 US-08-572-951-2	Sequence 2, Appl1
11	1047.6	36.9	2097 1 US-08-941-445A-10	Sequence 10, Appl1
12	912.2	32.1	2280 1 US-08-572-951-3	Sequence 25, Appl1
13	806.6	28.4	2418 3 US-09-388-743-25	Sequence 25, Appl1
14	806.6	28.4	2418 4 US-10-044-543-25	Sequence 5, Appl1
15	737.4	25.9	2348 4 US-09-388-743-5	Sequence 5, Appl1
16	737.4	25.9	2348 5 US-10-044-543-5	Sequence 5, Appl1
17	717.8	25.3	2793 3 US-08-836-567-7	Sequence 7, Appl1
18	717.8	25.3	2793 4 US-09-606-304-7	Sequence 7, Appl1
19	711.4	25.0	1926 3 US-08-836-567-5	Sequence 5, Appl1
20	711.4	25.0	1926 4 US-09-606-304-5	Sequence 5, Appl1
21	354.4	12.5	5058 3 US-09-889-595-1	Sequence 1, Appl1
22	354.4	12.5	5058 4 US-09-889-595-1	Sequence 1, Appl1
23	254.4	9.0	2542 3 US-08-941-445A-6	Sequence 6, Appl1
24	250	8.8	2267 3 US-08-679-645-25	Sequence 25, Appl1
25	248.4	8.7	1818 4 US-09-731-166-3	Sequence 3, Appl1
26	215.4	7.6	2383 3 US-09-192-909-1	Sequence 1, Appl1
27	215.4	7.6	2383 4 US-09-931-297-1	Sequence 1, Appl1

C	28	213.8	7.5	1528 3 US-09-345-214-6	Sequence 6, Appl1
C	29	213.8	7.5	1528 4 US-09-743-980-6	Sequence 6, Appl1
C	30	213.8	7.5	2008 3 US-09-345-214-12	Sequence 12, Appl1
	31	213.8	7.5	2008 4 US-09-743-980-12	Sequence 12, Appl1
	32	213.8	7.5	2491 3 US-09-345-214-5	Sequence 5, Appl1
	33	213.8	7.5	2491 4 US-09-743-980-5	Sequence 5, Appl1
	34	205.4	7.2	1620 3 US-08-941-445A-20	Sequence 20, Appl1
	35	205.4	7.2	1752 3 US-08-941-445A-12	Sequence 12, Appl1
	36	196.2	6.9	2990 1 US-08-572-951-1	Sequence 1, Appl1
	37	195.8	6.9	2239 1 US-09-196-390-1	Sequence 1, Appl1
	38	195.8	6.9	2239 4 US-09-352-677-1	Sequence 1, Appl1
	39	188.8	6.6	2360 3 US-08-836-567-9	Sequence 9, Appl1
	40	188.8	6.6	2360 4 US-09-606-304-9	Sequence 9, Appl1
	41	179	6.3	1440 4 US-09-902-540-7445	Sequence 7445, Ap
	42	179	6.3	4991 4 US-09-902-540-719	Sequence 719, Ap
	43	171.4	6.0	1758 3 US-08-836-567-3	Sequence 3, Appl1
	44	171.4	6.0	1758 4 US-09-606-304-3	Sequence 3, Appl1
	45	143.4	5.0	2202 3 US-09-388-743-1	Sequence 1, Appl1

ALIGNMENTS

RESULT 1
US-09-196-390-5
; Sequence 5, Application US/09196390
; Patent No. 6307125
; GENERAL INFORMATION:
; APPLICANT: Block, Martina
; APPLICANT: Lorz, Horst
; APPLICANT: Luticke, Stephanie
; APPLICANT: Walter, Lemart
; APPLICANT: Froberg, Claus
; APPLICANT: Kossmann, Jens
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
; TITLE OF INVENTION: FROM WHEAT WHICH ARE INVOLVED IN STARCH
; TITLE OF INVENTION: SYNTHESIS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave
; STREET: 1251 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10020
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/196.390
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: DE 196 21 588.9
; FILING DATE: 29-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: DE 196 36 917.7
; FILING DATE: 11-SEP-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP97/02793
; FILING DATE: 28-MAY-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Haley, Jr., James F.
; REGISTRATION NUMBER: 27,794
; REFERENCE/DOCKET NUMBER: AGREVO-9
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 596-9000
; TELEFAX: (212) 596-9090
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2825 base pairs

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Triticum aestivum L.
STRAIN: cv. Florida
TISSUE TYPE: ca. 21 d Caryopses
IMMEDIATE SOURCE:
LIBRARY: cDNA library in pBluescript sk (-)
CLONE: pTAS1
FEATURE:
NAME/KEY: CDS
LOCATION: 162..2559
US-09-196-390-5

Query Match 84.2%; Score 2392.2; DB 3; Length 2825;
Best Local Similarity 93.8%; Pred. No. 0;
Matches 2613; Conservative 0; Mismatches 108; Indels 66; Gaps 9;

QY 2 CTGGCAACCACTCCGCTTGGCGCGGCTTGGGGGAGACCAACCGCGCATGTACCA 61
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QY 62 TCGCGCCCGCCGATCCCGCGCGCGCATGTGTGGCGGTCGCGCGCTTC 121
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QY 242 CGGACCGAGATGTGGCGCGCGCGCGCGCGAGAAAGAGACGCGAGGTGACGAC 301
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QY 315 CGGACCGAGATGTGGCGCGCGCGCGCGCGAGAAAGAGACGCGAGGTGACGAC 374
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DB GCGCGCTGCGGAGGACGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGAG 434
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DB GGTCTCAAAATTTCTGCGCTTCTGCTTCCGAGGCTGACATTTGACAGGTGAA 854
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QY 915 CCGCTGCGACGCGCGCGCGCTGTACAAAGAACTTTGGGACTTCAAGAAATCATTTGCTTC 974
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QY 975 GAGAGCGCGTGAAGGCGCAAGATGATGCTGGGCTGTTGCAGATGATGCGGCTCCTTT 1034
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QY 1035 GAAATCATCAAGAACCAATGATTCGGAATCTTTGGCAGGCGGAGAACGTCATGAACTGTGTC 1094
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QY 1515 CTGCGCTGTATCTGAAGAGATTTTACAGGACCATGTTTGTGACGTACCTGGTTC 1574
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2595 GTCATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGATC 2640
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2641 --GAGCGCGGAGTGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGATC 2695
2642 GATTTCGATCTGCTCGGCTTCAATCGGCGCTTGAGAGAGAGAGAGAGATC 2701
2696 GATTTCGATCTGCTCGGCTTCAATCGGCGCTTGAGAGAGAGAGAGAGATC 2728
2702 TGCAGGATATGAGAGATGTCAGTGTGATGATGATGATGATGATGATGATGAT 2761
2729 --AGGATATGAGAGATGTCAGTGTGATGATGATGATGATGATGATGATGAT 2782
2762 TACATGTTTACTTATTTCTTTTAA 2788
2783 TACATGTTTACTTATTTCTTTTAA 2809

RESULT 2
US-09-952-677-5
Sequence 5, Application US/09952677
Patent No. 6734339

GENERAL INFORMATION:
APPLICANT: Block, Martina
Lorz, Horst
Luticke, Stephanie

Walter, Lennart
Frohberg, Claus
Kossmann, Jens
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
FROM WHEAT WHICH ARE INVOLVED IN STARCH
SYNTHESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: James F. Haley, Jr., c/o Fish & Neave
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/952,677
FILING DATE: 14-Sep-2001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/196,390
FILING DATE: 19-No. 6734339-1998
APPLICATION NUMBER: DE 196 21 588.9
FILING DATE: 29-MAY-1996
APPLICATION NUMBER: DE 196 36 917.7
FILING DATE: 11-SEP-1996
APPLICATION NUMBER: PCT/EP97/02793
FILING DATE: 28-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: AGREVO-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 2825 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Triticum aestivum L.
STRAIN: cv. Florida
TISSUE TYPE: ca. 21 d Caryopses
IMMEDIATE SOURCE:
LIBRARY: cDNA library in Bluescript sk (-)
CLONE: pTAS1
FEATURE:
NAME/KEY: CDS
LOCATION: 162..2559
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-952-677-5
Query Match 84.2%; Score 2392.2; DB 4; Length 2825;
Best Local Similarity 93.8%; Pred. No. 0;
Matches 2613; Conservative 0; Mismatches 108; Indels 66; Gaps 9;

2 CTCGACCACTCCGCTCGGCTGAGCGGAGAGAGAGAGAGAGAGAGAGATCAGCA 61
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542 CCG 601
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1442 CTCGCTGTCTATCTGAAGAGATTAACAGGAGCCATGATTTGATGACATGCTGCTCC 1501
1515 CTCGCTGTCTATCTGAAGAGATTAACAGGAGCCATGATTTGATGACATGCTGCTCC 1574
1502 ATTATGATGATTAATTAACATGCGGACACAGGAGCGGTGCGCCAGTGAATTCGCGTTC 1561
1575 ATTATGATGATTAATTAACATGCGGACACAGGAGCGGTGCGCCAGTGAATTCGCGTTC 1634
1562 ACCGAGTTCGCTGAGCATCTCTGGAACATTTGACACTGTAACAGCCCGGTGGTGGAG 1621
1635 ACCGAGTTCGCTGAGCATCTCTGGAACATTTGACACTGTAACAGCCCGGTGGTGGAA 1694
1622 CAGCGCAACTACTTCG 1681
1695 CAGCGCAACTACTTCG 1754
1682 GGGTACCTGTGGAGCTCAAAGCGGTGAGAGGCGCGTGGGGGCTTTCAGCATATACGG 1741
1755 GGGTACCTGTGGAGCTCAAAGCGGTGAGAGGCGCGTGGGGGCTTTCAGCATATACGG 1814
1742 CAGAGCATCTGGAAGACCCCGCGCATCTGTAACAGGATGCAACAATGAGTGAACCCC 1801
1815 CAGAGCATCTGGAAGACCCCGCGCATCTGTAACAGGATGCAACAATGAGTGAACCCC 1874
1802 GAGGTGAGCGTCCACCTCAAGTGGAGCGGAGCGGCTACCAACTTCTCCCTGGGGAGCGTGGAC 1861
1875 GAGGTGAGCGTCCACCTCAAGTGGAGCGGAGCGGCTACCAACTTCTCCCTGGGGAGCGTGGAC 1934
1862 TCCGCAAGCGGAGGTGCAAGAGAGCGCGCTGACGCGAGCTGAGGTCCGCGCC 1921
1935 TCCGCAAGCGGAGGTGCAAGAGAGCGCGCTGACGCGAGCTGAGGTCCGCGCC 1994
1922 GAGGTGCGGCTGCTCGGCTTATCTGCGCGCGCTGGAAGGAGGAGGCGTGAATATC 1981
1995 GAGGTGCGGCTGCTCGGCTTATCTGCGCGCGCTGGAAGGAGGAGGCGTGAATATC 2054
1982 GCGGAGCGCATGCGCTGAGATGTAAGCAGAGCATGAGTGAATGCTGAGGACCGGC 2041
2055 GCGGAGCGCATGCGCTGAGATGTAAGCAGAGCATGAGTGAATGCTGAGGACCGGC 2114
2042 CCGCAGCAGCTGAGAGCATGCTGCGGCACTTTCAGCGGAGGAGCAGCAGAGATGCGC 2101
2115 CCGCAGCAGCTGAGAGCATGCTGCGGCACTTTCAGCGGAGGAGCAGCAGAGATGCGC 2174
2102 GGGTGGGTGGGTTCTTCGCGCGCTGCGGCGCATCGGATCAACGCGCGCGCGCGCTC 2161
2175 GGGTGGGTGGGTTCTTCGCGCGCTGCGGCGCATCGGATCAACGCGCGCGCGCGCTC 2234
2162 CTGATGCGCTTCGCGGTTCGAGCGGTCGCGGTTGAACAGCTTTACGCAATGAGCTACGGC 2221
2235 CTGATGCGCTTCGCGGTTCGAGCGGTCGCGGTTGAACAGCTTTACGCAATGAGCTACGGC 2294
2222 ACCGTCCTGCTGAGACGCGCTGCGCGGAGTGAAGGACACGCTGCGCGCTTGCACCCC 2281
2295 ACCGTCCTGCTGAGACGCGCTGCGCGGAGTGAAGGACACGCTGCGCGCTTGCACCCC 2354
2282 TTCAACCACTCCGGGCTCGGGTGAAGCTTTCAGCCGCGCGAGGCGCAAGCTGATGAG 2341
2355 TTCAACCACTCCGGGCTCGGGTGAAGCTTTCAGCCGCGCGAGGCGCAAGCTGATGAG 2414

Qy	2342	GGCGTCGGGGACCTGCTCTCCGACACCTACCGGGAACTACAAAGAGAGAGCTGGAGGGGCTCCAG	2401
Db	2415	GGCGTCGGGGACCTGCTCTCCGACCTACCGGGAACTTCAAGAGAGAGCTGGAGGGGCTCCAG	2474
Qy	2402	GAGCGCGGCATGTGCGCAGAACTTCAGCTGGAGCATGCGGCCAACTCTACAGAGACGTC	2461
Db	2475	GAGCGCGGCATGTGCGCAGAACTTCAGCTGGAGCATGCGGCCAACTCTACAGAGAGCCTC	2534
Qy	2462	CTCCTCAAGGCCAAGTACCACTAGTGTGAACGCTAGCTGTACCGCTCCAGCCCCGATAC	2521
Db	2535	CTCCTCAAGGCCAAGTACCACTAGTGTGAACGCTAGCTGTACCGCTCCAGCCCCGATAC	2594
Qy	2522	GTGCATGCATGAGAGGGGTGAACCTGCTGCGATTCGCGCCCCCAGAGAAAGTGCATCCCTTCG	2581
Db	2595	G-----TGATGACAGAGATGAACT--GCATTCGCGACCCAGAGAAAGTGCAT-----	2641
Qy	2582	ATGGAGACGCGCGCGCATCCGCGAGGTGCAGTACATGAGAGGTGTGTGTGTTGAGACGCT	2641
Db	2641	---GGAGCGCGCGCATCCGCGAAGTACAGTACAT--GAGGTGTGTGTGTTGAGACGCT	2695
Qy	2642	GATTCGCATTCGATGTCGTGTCGTAAGCAGAGAGAGCGGAGGTAGGGAGAGGCTCCTTGT	2701
Db	2696	GATTC-----CAATCCGCGCCCGTAGCAGATGAGCGG-----	2728
Qy	2702	TGCAGGATATAGGAATGTTGTCAACTTGATTTGTAATGTTGTAATGTTATGCGTTAT	2761
Db	2729	---AGGTATATGGGAATCTT--AACTTGATTTGTAATTTGTAATGTTGTGTGATTAAT	2782
Qy	2762	TACAAATGTTTACTTACTATTTCTTTTAA	2788
Db	2783	TACAAATGTTTACTTACTATTTCTTTTAA	2809

```

RESULT 3
US-09-345-214-20
: Sequence 20, Application US/09345214
: Patent No. 6592120
: GENERAL INFORMATION:
: APPLICANT: Lightner, Jonathan E.
: APPLICANT: Broglie, Karen E.
: TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE
: TITLE OF INVENTION: EXPRESSION TO PRODUCE STARCHES IN GRAIN CROPS
: FILE REFERENCE: BR-1147
: CURRENT APPLICATION NUMBER: US/09/345,214
: CURRENT FILING DATE: 1999-06-30
: EARLIER APPLICATION NUMBER: 060/094,436
: EARLIER FILING DATE: 1998-07-28
: NUMBER OF SEQ ID NOS: 20
: SOFTWARE: Microsoft Office 97
: SEQ ID NO 20
: LENGTH: 2248
: TYPE: DNA
: ORGANISM: Zea mays
: US-09-345-214-20

```

	Query Match	43.8%	Score 1246;	DB 3;	Length 2248;
	Best Local Similarity	84.6%;	Pred. No.3.2e-257;		
	Matches 1399;	Conservative 0;	Mismatches 259;	Indels 0;	Gaps 0;
QY	840	CGCGCGCTGCAGCCCCCGCTGTACAGAGAGACTTGTGGACTTCAGAGAAATACATTGGCT	899		
Db	553	CTCTACAGTTGAACATTAGTATACAGGAGCGCACTTGGGATTTCAAGAAATACATCGGTT	612		
QY	900	TCGAGAGACCCCTGTGAGGCGCAAGATGATGCGCTGTGGCTGTTCGACATGATCGCGCTCTCT	959		
Db	613	TTGACGAGCCTCGAGAGACCGAAGATGATTTCAAGGTTGTGCGACATGATCTCGTCTTCTT	672		
QY	960	TTGAACATCACAGAACCATGATTCCCGGACCTTTTGGCAGGGGAGACGTCATGGAACGTGG	1019		
Db	673	TTGAACATTTATGGGGACATATATTTCTGGGCTTTTGGCCGGGAGAAATGTTATGAACGTGA	732		
QY	1020	TCGTCGTGGCTGTGAATGTTCTCCCTGGTGCAGAAACAGAGTGCTCTTGAGATGTGGCG	1079		

Db	733	TCGTGGTGGCTGCTGATATGTTCTCCATGAGTGCAAAACAGGTGGTCTTGGAGATGTTGGG	792
Qy	1080	GTGCTTTGGCCCAAGGCTTTGGCGAAGAGACATCGTGTATGGTTGTGTACCAAGT	1139
Db	793	GAGCTTTACCCAAAGCTTTAGCGAAGAGACATCGTGTATGGTTGTGTGTAACCAAGT	852
Qy	1140	ATGGGACATATGAGGAAGCCTTACATGTCCGAGTCCGAAATATCTACAAAGCTGTGCAC	1198
Db	853	ATGGGACATATGAGGAAGCCTTTGATATGGGAATCCGGAAATATCTACAAAGCTGTGCAGAC	912
Qy	1200	AGGATATGGAGTGAATTAATTTCCATGCTTATTCGATGAGGTGATTTGGTTCAATG	1255
Db	913	AGGACCTAGGAAGTGAATTAATTTCCATGATTTATGAGAGTGCACTTTGGTTCAATG	972
Qy	1260	ACGCTCTCTCTTCCGACACCCGACAGGAGACATTTATGGGGGACGACAGCAAAATTA	1319
Db	973	ATGCCCCCTCTTTCGGGACCGCTGAAGATGACATATATGGGGGAAGTATGGCAGGAATCA	1033
Qy	1320	TGAAGCGCATATTTGTTCTGCAAGGCCGCTGTGAGGTTCTTTGGCAGTTCATCCG	1378
Db	1033	TGAAGCGCATATTTGTTTGGCAAGGTGCTGTGAGGTTCTTTGGCAGCTTCATCCG	1092
Qy	1380	GCGGTGCCCTTATGGGAGTGGAAATCTGGTGTATTTGCAATGATTTGGACACGGAC	1433
Db	1093	GTTGTGTGTGCTACGGAGATGGAAATTTGGTGTTCATTTGCCAAATGATTTGGACACTGCAC	1155
Qy	1440	TCTCGACCTGTCTATCTGAAAGCATATTTACAGGAGCAATGGTTTATGTCAGTACACTCGGT	1499
Db	1153	TCTCGCTCTGTTATCTGAAAGCATATTTACAGAGACATGGTTTATGTCAGTACACTCGCT	1212
Qy	1500	CCATTATGTGTATACATTAACATTCGCGCACCAAGGCCGCTGGCCAGTATGAAATTCGCCGT	1555
Db	1213	CCGTCTCTGTATACATTAACATTCGCCCACCAAGGCCGCTGGGTCTGTATGAAATTCGCCGT	1272
Qy	1560	TCACCGAGTTGCCCTGAGCATCTACTGGAAACCTTCAGACTTATGACCCCGTGGGTGTG	1619
Db	1273	ACATGGACTTGGCTCGAAACACTCACTTCAACATTTCCAGCTGTATGATCCCGTGGGTGCG	1332
Qy	1620	AGCACGCAACCTACTTTCGCGCGCGCGGCTCGAAAGATGGCGGACCAAGTTTGTCTGGTAGACC	1679
Db	1333	AGCACGCAACATCTTTTGC CGCGGCTGTGAAAGATGGCAGACCGGATGTGACTGTCAACC	1392
Qy	1680	CCGGGTACTCTGTGGAGCTCAAGACGATGAGGGCGGCTGGGGGCTTCAACGACATCATAC	1739
Db	1393	GCGGCTACTGTGGAGCTGAAGACATGAGGAGCGGCTGGGGCTCAACGACATCATCC	1452
Qy	1740	GGCAGAACGACTGGAAGACCCGCGCATTCGTCAACGGCATTGACACATGAGTGGAAAC	1799
Db	1453	GTTCTTACGACTGGAAATCATATGGACATCTGGAACCGCATTCGACACACGAGATGGAAAC	1512
Qy	1800	CCGAGGTGGAGTCGTCAACCTCAAGTCGAGCGGCTTACCAATTTCTCCCTGGGGACGCTGG	1855
Db	1513	CCAAAGTGGAGTGCACCTTCGCGGTGAGCGGCTTACCAACATTTCTCCCTGAGACACTCG	1572
Qy	1860	ACTCCGCAAGCGGCACTGCAAGAGGCCCTGACGCGCGAGCTGGGCTGCGAGGTCCGCG	1919
Db	1573	ACGCTGGAAGCGGCACTGCAAGCGCGGCTGACGCGGAGCTGGGCTGGAATTCGCGG	1632
Qy	1920	CCGACGTGGCGCTGCTCGGCTTCAATCGGCGCGCTGACCGGACAGAGGGCTGTGAGATCA	1979
Db	1633	ACGACGTGGCGCTGCTCGGCTTCAATCGGCGGTGTGATGACAAAGGGCTGTGACATCA	1692
Qy	1980	TTCGGGACGCGCATGCCCTGATTCGTTGAGCCAGACGTCGACGTGTATGCTGGGCAACCG	2039
Db	1693	TTCGGGACGCGCATGCCCTGTGATTCGCGGGGACGAGCGTCGACGTGTATGCTGGGCAACCG	1752
Qy	2040	GCCGCAACGACTTGGAGACATGCTGGCGCACTTCAGACGGGAGACCAACGACAAGGTGC	2099
Db	1753	GCGCGCGGACCTTGGAGACATGCTGTGACACTTGGAGCGGAGACATCCCAACAAGGTGC	1812
Qy	2100	GCGGCTGGGTGCGGTCTCCGTGGCTGTGCGCACCGGATTCACGGCGGGCGCCGACCGCGC	2159

Db 1813 GCGGGTGGTGGGTTCTCGGTCCCTATGCGCATCCCATCACGGCGGGCGCGACGTGC 1872
QY 2160 TCCCATGACCCCTCCGGGTGAGCCGTGCGGGTGAACCAAGCTTTAGCCATGAGCTACG 2219
Db 1873 TGGTGAATGACCTCCCGCTTGAAGCCCTGCGGGCTGAACCAAGCTTTAGCCATGAGCTACG 1932
QY 2220 GCACCGTCCCGGTGCTGTCAGCGCGGTGCGGGGTGAGGAGACCGTGCCTGCTTGAAC 2279
Db 1933 GCACCGTCCCGGTGCTGTCAGCGCGGTGCGGGGTGAGGAGACCGTGCCTGCTTGAAC 1992
QY 2280 CTTTCAACCACTCCGGGTGCTGTCAGCGCGGTGCGGGGTGAGGAGACCGTGCCTGCTTGAAC 2339
Db 1993 GCTTCAACCAAGCGCGGTGCTGTCAGCGCGGTGCGGGGTGAGGAGACCGTGCCTGCTTGAAC 2052
QY 2340 AGGCGCTCGGCACTGCTCCGCACTACCGGCACTCAAGGAGCTGAGGAGGCTCC 2399
Db 2053 AGGCGCTCGGCACTGCTCCGCACTACCGGCACTCAAGGAGCTGAGGAGGCTCC 2112
QY 2400 AGGAGCGCGCATGTCGAGAGCTTCACTGAGAGCATGCCGCAAGCTTACGAGAGCG 2459
Db 2113 AGGCGCGCGCATGTCGAGAGCTTCACTGAGAGCATGCCGCTGAGCTTACGAGAGCG 2172
QY 2460 TCCCTCCCAAGGCCAATGACAGTGTGAAGCT 2493
Db 2173 TCCCTGTCAGGCGCAAGTACAGTGTGAACCTT 2206

RESULT 4
US-09-743-980-20
; Sequence 20, Application US/09743980
; Patent No. 6570008
; GENERAL INFORMATION:
; APPLICANT: E. I. du Pont de Nemours and Company
; TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE
; TITLE OF INVENTION: EXPRESSION TO PRODUCE STARCHES IN GRAIN CROPS
; FILE REFERENCE: BB-1147-A
; CURRENT APPLICATION NUMBER: US/09/743, 980
; CURRENT FILING DATE: 2001-05-14
; PRIOR APPLICATION NUMBER: 060/094,436
; PRIOR FILING DATE: 1998-07-28
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 20
; LENGTH: 2248
; TYPE: DNA
; ORGANISM: Zea mays
US-09-743-980-20

Query Match 43.8%; Score 1246; DB 4; Length 2248;
Best Local Similarity 84.6%; Pred. No. 3,2e-257;
Matches 1399; Conservative 0; Mismatches 255; Indels 0; Gaps 0;
QY 840 CGCGGCTGACGCCCCCGCTGTACAGAGACCTTTGGGACTTCAAGAAATACATTGGCT 899
Db 553 CTCCTACAGTTGAACCAATTAGTACAGAGCGCACTTGGATTCAAGAAATACATTGGCT 612
QY 900 TCGAGAGCCCGTGAAGGCCAAGATGATGAGCTGTGTGAGATGATCGGAGCTCT 959
Db 613 TTGACGAGCTGAGAGAGCAAGATGATTCAGAGGTTGTGTGAGATGATCTGTCTT 672
QY 960 TTGAACATCACAGAACCATGATTCGAGACCTTTGGCAGGGAGAACGTCATGAACGTG 1019
Db 673 TTGAACATTAAGGAGCAATGATTCGAGGCTTTGGCGGGGAGAAATGTTATGAACGTGA 732
QY 1020 TCGTCGTGGCTGTGATGTTCTCCCTGTGTGCAAAACAGTGTGCTTTGGAGATGTTGCCG 1079
Db 733 TCGGTGTGGCTGTGAAATGTTCTCATGTGTGCAAAACAGTGTGCTTTGGAGATGTTGGG 792
QY 1080 GTGCTTGGCCCAAGCTTTGGCAAGAGAGACATCGTGTATGTTGTGTGTTACCAAGT 1139
Db 793 GAGCTTATACCAAGGCTTTAGCGAAGAGAGACATCGTGTATGTTGTGTGTACCAAGT 852
QY 1140 ATGGGACCTATGAGAGAACCTTACGATGTCCGAGTCCGAAATACTACAGAGGCTGCGAC 1199

Db 853 ATGGGACCTATGAGAGAACCTTTGATATGGAAATCCGAAATCTCAAAAGCTGCAAGAC 912
QY 1200 AGATATGAGAGTGAATATTTTCATGCTTATATGATGAGAGTGAATTTGTGTCAATG 1259
Db 913 AGAATCTAGAGTGAATATTTTCATGCTTATATGATGAGAGTGAATTTGTGTCAATG 972
QY 1260 ACGTCTCTCTTCCGACACCGCAGAGAACATTTATGAGGAGCAGCAGAGAAATTA 1319
Db 973 ATGCCCCCTTTTCCGACACCGTCAGATATATATGAGGAGATGAGCAGAGAAATTA 1032
QY 1320 TGAAGCGCATGATTTTGTCTGCAAGCGCGCTGTCAAGTTCCTTGGCAAGTTCCATGCG 1379
Db 1033 TGAAGCGCATGATTTTGTCTGCAAGCGCGCTGTCAAGTTCCTTGGCAAGTTCATGCG 1092
QY 1380 GCGGTGTCCTTATGAGGAGTGAATATGAGTGTATTTATGCAAAATGATTTGCAACAGGAC 1439
Db 1093 GTGCTGTGTCTACGAGATGAAATTTGATGTTTCATTTGCAATGATTTGCAACAGGAC 1152
QY 1440 TCCGTCTGTCTATCTGAAAGCATATTTACAGGACCATGATTTGATGACATGCTGCT 1499
Db 1153 TCCGTCTGTCTATCTGAAAGCATATTTACAGGACCATGATTTGATGACATGCTGCT 1212
QY 1500 CCATTATGATGATATCATTAATGCGGACCAAGGCGGTGACCATGATGATGATTTCCCGT 1559
Db 1213 CCGTCTGTCTATCATTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1272
QY 1560 TCAACGAGTGGCTGAGACCATCTGGAACATTTACAGTGTGATGATGATGATGATGATGAT 1619
Db 1273 ACATGAGCTTGTCTGAGACCATCTTACATTTGAGCTGTGATGATGATGATGATGATGAT 1332
QY 1620 AGCAGCGCAATCTTGTGCGCGCGGCTGGAATGCGGACCAAGTGTGTGTGTGAGCC 1679
Db 1333 AGCAGCGCAATCTTGTGCGCGCGGCTGGAATGCGGACCAAGTGTGTGTGTGAGCC 1392
QY 1680 CCGGATACCTGTGTGAGCTCAAGACGTGTGAGAGGCGCTGTGGGCTTCAAGATCATATAC 1739
Db 1393 GCGGCTACCTGTGTGAGCTCAAGACGTGTGAGAGGCGCTGTGGGCTTCAAGATCATATAC 1452
QY 1740 GCGAGAGCATGAGAAACCGCGGCGCTGTCAACCGGATGCAACATGATGATGATGATGAT 1799
Db 1453 GTTCTTACGACTGAGAAATCAATGATGATGATGATGATGATGATGATGATGATGATGAT 1512
QY 1800 CCGAGGTGAGCTGTCAACCTTCAAGTGTGAGCGGCTTACCAACTTCTCCCTGGGACGCTG 1859
Db 1513 CCAAGGTGAGCTGTCAACCTTCAAGTGTGAGCGGCTTACCAACTTCTCCCTGGGACGCTG 1572
QY 1860 ACTCGGCAAGCGGCACTGTCAAGAGGCTGTGAGCGGCTGTGGGCTTCAAGATCATATAC 1919
Db 1573 ACGCTGAAAGCGGCACTGTCAAGAGGCTGTGAGCGGCTGTGGGCTTCAAGATCATATAC 1632
QY 1920 CCGAGGTGAGCTGTCAACCTTCAAGTGTGAGCGGCTTACCAACTTCTCCCTGGGACGCTG 1979
Db 1633 ACGAGGTGAGCTGTCAACCTTCAAGTGTGAGCGGCTTACCAACTTCTCCCTGGGACGCTG 1652
QY 1980 TCGGAGAGCCCATGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2039
Db 1693 TCGGAGAGCCCATGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1752
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Db 1753 GCGGCAAGACCTGTGAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 1812
QY 2100 GCGGAGTGGGAGGTTTCCGTGAGCTGTGAGAGCGGATCAAGGAGGAGGCGGAGCGG 2159
Db 1813 GCGGAGTGGGAGGTTTCCGTGAGCTGTGAGAGCGGATCAAGGAGGAGGCGGAGCGG 1872
QY 2160 TCCCATGACCCCTCCGGGTGAGCCGTGCGGGTGAACCAAGCTTTAGCCATGAGCTACG 2219
Db 1873 TGGTGAATGACCTCCCGCTTGAAGCCCTGCGGGCTGAACCAAGCTTTAGCCATGAGCTACG 1932
QY 2220 GCACCGTCCCGGTGCTGTCAGCGCGGTGCGGGGTGAGGAGACCGTGCCTGCTTGAAC 2279

Db 1933 GCACCGCTCTGTGTGTCACGCGCGGGCTCAGGAGACACCGTGGCCGCTTCGACC 1992
Qy 2280 CCTTCAACCACTCCGCGCTTGGGGTGGACGTTCCAGCCGCGCGGAGCCCAACAGCTGATCG 2339
Db 1993 CGTTTACCGCAGCGCGGGCTGGGGTGAATTGTCGCGCGCGGAGCCCAACAGCTGATCG 2052
Qy 2340 AGGCGCTCGGAGCACTGCTCCGACCACTACCGGAGCTCAAGAGAGCTGAGGGGCTTC 2399
Db 2053 AGGCGCTCAGGCACTGCTCCGACCACTACCGGAGCTCAAGAGAGCTGAGGGGCTTC 2112
Qy 2400 AGGAGCGCGGCACTGTGCGAGCACTTACGTGGAGCATGCGCCAGCTTACGAGAGCG 2459
Db 2113 AGGCGCGGCGCATGTGCGAGCACTTACGTGGAGCATGCGCGGCTGAGCTTACGAGAGCG 2172
Qy 2460 TCCTCTCAAGGCGCACTACGATGTGAAACGCT 2493
Db 2173 TCCTGTCAAGGCGCACTACGATGTGAAACCT 2206

RESULT 5

US-09-345-214-16/c
; Sequence 16, Application US/09345214
; Patent No. 6392120
; GENERAL INFORMATION:
; APPLICANT: Lightner, Jonathan E.
; TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE
; FILE REFERENCE: 88-1147
; CURRENT APPLICATION NUMBER: US/09/345,214
; EARLIER FILING DATE: 1999-06-30
; EARLIER APPLICATION NUMBER: 060/094,436
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 16
; LENGTH: 1798
; TYPE: DNA
; ORGANISM: Zea mays
; US-09-345-214-16

Query Match 43.8%; Score 1245.2; DB 3; Length 1798;
Best Local Similarity 84.5%; Pred. No. 4,4e-257;
Matches 1397; Conservative 2; Mismatches 255; Indels 0; Gaps 0;

Qy 840 CGCGCGCTGAGCGCCCGCTGTACCAAGAGACCTTTGGGACTTCAAGAAATACATTGGCT 899
Db 1696 CTCCTACAGTTGAGCCATTAGTACAGAGGCCACTTGGATTCAAGAAATACATCGGTT 1637
Qy 900 TCAGAGAGCGCGGTGGAGGCCAAGATGATGGCTGGCTGTTCAGATGATGCGGCTCT 959
Db 1636 TTACAGAGCGCTGAGCAAGCAAGATGATTCAGGGTGTGTGAGATGATGCTGTTCTT 1577
Qy 960 TTGAACATCACAGAACCATGATTCGAGACCTTTGGAGGGGAGAAAGTATGAAAGTGG 1019
Db 1576 TTGAACATTAATGGAGCAATGATTTCTGGGCTTTGGCGGAGAAATGTTATGAACGTGA 1517
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Db 1516 TCGGTGTGCTGTGAATGTTCTCCATGTGTCAAAACAGGTGTCTTGAAGATGTTGCG 1457
Qy 1080 GTGCTTTGCCCAAGGCTTTGGCGAAGAGAGACATGCTGTTATGTGTGTGATCCAAAGT 1139
Db 1456 GACCTTTATCCCAAGGCTTTAGCGAAGAGAGACATGCTGTTATGTGTGTGATCCAAAGT 1397
Qy 1140 ATGGAGCACTAGAGAGAGCCACAGATGTGAGAGTCCGAAATATCAAGAGCTGTGAGC 1199
Db 1396 ATGGAGCACTATGTGAGAGCCCTTTGATATGGAAATCCGAAATATCAAGAGCTGTGAGC 1337
Qy 1200 AGGATATGAAGTGAATTAATTTCCATGCTTAATATGATGAGAGTGAATTTGTGTTCAATG 1259
Db 1336 AGGAGCTAGAGAGTGAATTAATTTCCATGCTTAATATGATGAGAGTGAATTTGTGTTCAATG 1277

Qy 1260 ACCGCTCTCTCTTCCGACACCGCCAGAGAACATTTATGGGGGACAGACAGAAATTA 1319
Db 1276 ATGCCCCCTCTTTTCCGACACCGCTCAAGATGACATATATGGGGGAAATGAGGAGAAATCA 1217
Qy 1320 TGAAGCGATGATTTTGTCTGTGCAAGCGCGCTGTGAGGTTCTTTGACAGTTCCATGCG 1379
Db 1216 TGAAGCGATGATTTTGTGTTCAGAGTTGCTGTGAGGTTCTTTGACAGTTCCATGCG 1157
Qy 1380 GCGGTCTCCCTTAATGGAGATGGAATCTGTGTTTATGCAATATGATGAGCAACGCGCAC 1439
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Qy 1440 TCCTGCTGTCTATCTGAAGCATATTTACAGGAGCATGATGTTTATGATGAGTACATCGCT 1499
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Qy 1500 CCAATTAATGTGATATCAATCAATGCGCACCGAGGCGGTGCGCCAGTATGAAATTCGCT 1559
Db 1036 CGGTCTCGTATATCAATCAATGCGCACCGAGGCGGTGCGCTGTATGATGAATTCGCT 977
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Db 796 GTTCTACAGCTGGAAGATCAATGAGCATGTGAAACGCGATCGAACAGAGATGGAACC 737
Qy 1800 CCGAGGTGAGCGTCCACTTCAAGTCCGACGCGCTTACCACTTCTCCCTGTGGAGCGCTGG 1859
Db 736 CCAAGGTGAGCGTCCACTTCCGCGCTGAGCGCGCTTACCACTTCTCCCTGTGAGCACTCG 677
Qy 1860 ACTCCGCGCAAGCGGAGTGAAGAGAGGCGCTGACGCGGAGCGGAGCTGTGGCTGTGCGCG 1919
Db 676 AGCTGGAAGAGCGGAGTGAAGAGGCGCGCTGACGCGGAGCGTGTGGAGTGTGCGCG 617
Qy 1920 CCGAGTGTGCTGTGCGCTTATGTCGCGCTTATGTCGCGCGGAGGAGGAGGCTGTGAATCA 1979
Db 616 ACAGAGTGTGCGCTGTGCGCTTATGTCGCGCGTGTGATGAGCAAGAGGCGTGTGAATCA 557
Qy 1980 TCGCGAGCGCAATGCGCTGGAATGTGAGCGGAGCGGAGCGGAGCTGTGATGCTGTGGACCG 2039
Db 556 TCGGAGACGCGATGCGGTGATGCGGAGGAGGAGCGGAGCTGTGATGCTGTGGACCG 497
Qy 2040 GCCGCGACGACTGAGAGAGCATGCTGCGGACTTTCAGCGGAGGAGCAACAGCAAGGTGC 2099
Db 496 GGGCGCGCGACCTGGAAGAGATGCTGACAGCACTTGAAGGGAGGAGCAATCCAAAGAGTGC 437
Qy 2100 GCGGAGTGTGGGTTCTCCGTGCGCTGCGCGGAGCGGAGTCAATGCGGAGGCGCGGAGCGCG 2159
Db 436 GCGGAGTGTGGGTTCTCCGTGCGCTGCGCGGAGCGGAGTCAATGCGGAGGCGCGGAGCGCG 377
Qy 2160 TCCTCAATGCGCTCCGAGTTTCAAGCGGAGCGGAGGAGTGAACAGCTTTCAGGACATGAGCGCTACG 2219
Db 376 TGGTGAATGCGCTCCGCTTCAAGCGCTTGGAGGAGTGAACAGCTTTCAGGAGTGAATGAG 317
Qy 2220 GCACCGTCCCGCTGTGACGCGCTGCGGCGGAGTGAAGAGCAACGTTGCGCGCTTTCAGCC 2279
Db 316 GCACCGTCCCGTGTGAGAGCGCGGTGGGGGAGTGAAGAGCAACGTTGCGCGCTTTCAGCC 257
Qy 2280 CTTTCAACCACTCCGCGCTGTGGGTGAGCTTCAACGCGCGGAGGCGCAACAGCTATGCG 2339
Db 256 CGTTCAAGCGAGCGCGGAGCTGTGGGTGAGCTTTCAGCGGAGGCGCAACAGCTATGCG 197
Qy 2340 AGGCGCTCGGAGCACTGCTCCGCACTTACCGGAGCTTACAGAGAGAGTGAAGGGGCTTC 2399

|||||
Db AGGCGCTCAGGCACTGCTCGACACGATCCGGAACACTGAGAGAGCTGGAAAGTCTCC 137
Qy 2400 AGGAGCCCGGATGCTCCGAGACCTTCAGCTGGGAGCATGCCGCAAGCTCAACAGAGACG 2459
Db 136 AGGGCCCGGATGCTCCGAGACCTTCAGCTGGGAGCAACGCGGCTGAGCTCAACAGAGACG 77
Qy 2460 TCCTCTCAAGGCCAAGTACAGTGTGAACGCT 2493
Db 76 TCCTGTCAAGGCCAAGTACAGTGTGAACCT 43

RESULT 6
US-09-743-980-16/c
; Sequence 16, Application US/09743980
; Patent No. 6570008
; GENERAL INFORMATION:
; APPLICANT: E. I. du Pont de Nemours and Company
; TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE
; TITLE OF INVENTION: EXPRESSION TO PRODUCE STARCHES IN GRAIN CROPS
; FILE REFERENCE: BB-1147-A
; CURRENT APPLICATION NUMBER: US/09/743,980
; CURRENT FILING DATE: 2001-05-14
; PRIOR APPLICATION NUMBER: 060/094,436
; PRIOR FILING DATE: 1998-07-28
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 16
; LENGTH: 1798
; TYPE: DNA
; ORGANISM: Zea mays
US-09-743-980-16

Query March 43.8%; Score 1245.2; DB 4; Length 1798;
Best Local Similarity 84.5%; Pred. No. 4.4e-257;
Matches 1397; Conservative 2; Mismatches 255; Indels 0; Gaps 0;

Qy 840 CGCCGCTGAGCCCGCTGTACAGAGACCTTTGGGACTTCAAGAAATACATTGACT 899
Db 1696 CTCCTACAGTTGAGCCATTGATACAGAGGCGCACTTGGGATTTCAAGAAATACATTGCGTT 1637
Qy 900 TCGAGAGCCCGTGGAGGCGCAAGATGATGCTGGCTGTTGCAGATGATGCGGCTCT 959
Db 1636 TTGACGAGCTTGAAGAGCGAAGGATGATTCAGGGTGTGTGACAGATGATGCTGTTCTT 1577
Qy 960 TTGAACATCCACAGAACATGATTCGCGAAGCTTTGGAGGGGAGAAAGTCAATGAACGTG 1019
Db 1576 TTGAACATTTATGGGACATGATTTCTGGGCTTTGGCCGGGAGAAATGTTATGAACGTGA 1517
Qy 1020 TCGTGTGCTGTGAATGTTCTCCCTGTGTCAAAACAGGTGATCTTGGAGATGTTGCG 1079
Db 1516 TCGGTGTGCTGTGAATGTTCTCCATGTGTCAAAACAGGTGATCTTGGAGATGTTGCG 1457
Qy 1080 GTGCTTGGCCCAAGGCTTTGGCGAAGAGACATCGTGTATGCTGTGTGTACCAAGT 1139
Db 1456 GAGCTTTAACCCAAAGCTTTAGCGAAGAGACATCGTGTATGCTGTGTGTACCAAGT 1397
Qy 1140 ATGGGAGCTATGAGAAAGCCATGATGTCCGAGTCCGAAAATATACAGGCTGTGAGAC 1199
Db 1396 ATGGGAGCTATGAGAAAGCCCTTATGATGTGGAATTCGGAATATACAAAGCTCAAGAC 1337
Qy 1200 AGATATGAGAAATATTTATTCATGCTTATATGATGATGAGTGTGATTTGTGTTCAATG 1259
Db 1336 AGGACCTAGAAAGTACATTTTCATGATTTATGATGAGTGTGATGCTTGTGTCAATG 1277
Qy 1260 ACGTCTCTCTTCCGACCGCGCAAGAGACATTTATGCGGCGACGACAGACAGAAATTA 1319
Db 1276 ATGCGCTCTTTTCCGCGACCGTCAAGATGACATATATGCGGGAAGTAGAGGAAATTA 1217
Qy 1320 TGAAGCCAGATGATTTGTTGTGCAAGCGCGCTGTGAGGTTCTTGGACAGTTCCATGCG 1379
Db 1216 TGAAGCCAGATGATTTGTTGTGCAAGGTTGTTGAGGTTCTTGGACAGTTCCATGCG 1157

Qy 1380 GCGGTGCTCCCTTATGAGGATGAGAAATCTGTGTTTATTTGCAAAATGATTTGCAACGCGCAC 1439
Db 1156 GTGTGTGTCTACGGAGATGAGAAATTTGTGTTTCAATTTGATTTGCAACTGTCAC 1097
Qy 1440 TCCTGCTGTCTATCTGAAGCATATTTACAGGACCATGTGTTGATGATGATCACTGCT 1499
Db 1096 TCCTGCTGTCTATCTGAAGCATATTTACAGGACCATGTGTTGATGATGATCACTGCT 1037
Qy 1500 CCATTTATGATATCATATCATGCGGACAGGCGCGTGGCCCATGATGATGATTTCCGT 1559
Db 1036 CCGTCTCTGTCATATCATATCATGCGGACAGGCGCGTGGCTCTGATGATGATTTCCGT 977
Qy 1560 TCACCGAGTTGCTGAGCACTACCTTGAACATTTCAACTGATACGACCCCTGGGTGTG 1619
Db 976 ACATGAGCTTGCTGAACATCACTTCAATTTGAGCTGTACGATCCCGTGGTGGCG 917
Qy 1620 AGCACGCCAATCTTTCGCGCGGCTGTGAAGATGGCGGACGAGTGTGTGTGAGCC 1679
Db 916 AGCACGCCAATCTTTCGCGCGGCTGTGAAGATGGCGGACGAGTGTGTGATGTCAGCC 857
Qy 1680 CCGGCTACCTGTGGAGCTCAAGACGAGTGGAGGCGGCTGGGGCTTCAAGACATCATAC 1739
Db 856 GCGGCTACCTGTGGAGCTCAAGACGAGTGGAGGCGGCTGGGGCTTCAAGACATCATAC 797
Qy 1740 GGCAGAACGACTGGAAAGCCCGCGCATCTCAACCGCATCGAACATGAGTGAAC 1799
Db 796 GTTCTAACGACTGGAAAGCATGATGATGATGATGATGATGATGATGATGATGATGATGAT 737
Qy 1800 CCGAGTGTGACCTTCACCTCAAGTCCGAGCGGCTTACACCACTTCTCCCTGGGACGCTGG 1859
Db 736 CCAAGTGTGACCTTCACCTCAAGTCCGAGCGGCTTACACCACTTCTCCCTGGGACGCTGG 677
Qy 1860 ACTCCGCAAGCGGCAAGTGTGCAAGAGGCGCTGAGCGCGAGCTGTGGGCTCAGGTCGCG 1919
Db 676 ACCTGTGAAGAGCGGCAAGTGTGCAAGAGGCGCTGAGCGCGAGCTGTGGGCTCAGGTCGCG 617
Qy 1920 CCGAGTGTGCTGTGCTGCTGCTTCAATGCGCGCTGAGCGGCGAGAGGCGTGAATCA 1979
Db 616 ACAGAGTGTGCTGTGCTGCTTCAATGCGCGCTGAGCGGCGAGAGGCGTGAATCA 557
Qy 1980 TCGCGAGCGCATTCCTGTGATGTGAGCCAGAGACGTGTGATGATGATGATGATGATGATGAT 2039
Db 556 TCGCGAGCGCATTCCTGTGATGTGAGCCAGAGACGTGTGATGATGATGATGATGATGATGAT 497
Qy 2040 GCGGCGGAGCTGTGAGAGCATGCTGTGCGGCACTTTCGAGCGGAGACCAAGCAAGGTGC 2099
Db 496 GCGGCGGAGCTGTGAGAGCATGCTGTGCGGCACTTTCGAGCGGAGACCAAGCAAGGTGC 437
Qy 2100 GCGGCTGTGAGGCTTCTCGGTGCGCTGCGGACCGGATCACGGCGGCGCGGCGCGC 2159
Db 436 GCGGCTGTGAGGCTTCTCGGTGCGCTTATGCGGATCGCATCACGGCGGCGCGGCGCGC 377
Qy 2160 TCCTCATGCTCTCCGTTTGAAGCCGTGCGGCTTGAACCAAGCTTTCAGCATGCTTACG 2219
Db 376 TGTGTGATGCTCTCCGCTTGAAGCCGTGCGGCTTGAACCAAGCTTTCAGCATGCTTACG 317
Qy 2220 GCACCGTCCCGTGTGTCGAGCGGCTGCGGAGTGAAGGACACCGTGTCCGCTTTCAGC 2279
Db 316 GCACCGTCCCGTGTGTCGAGCGGCTGCGGAGTGAAGGACACCGTGTCCGCTTTCAGC 257
Qy 2280 CTTTCAACCACTCGGCTGTGGGTGACGTTTGAACCGCGGCTGAGGCGACAAAGCTGATCG 2339
Db 256 CGTTTCAACCACTCGGCTGTGGGTGACGTTTGAACCGCGGCTGAGGCGACAAAGCTGATCG 197
Qy 2340 AGGCGCTCGGCGCACTGCTTCCGACCTTACCGGAGCTTCAAGAGAGCTTGAAGGCGCTCC 2399
Db 196 AGGCGCTCGGCGCACTGCTTCCGACCTTACCGGAGCTTCAAGAGAGCTTGAAGGAGTCTCC 137
Qy 2400 AGGAGCGCGGATGTGCGACAGACTTTCAGTGTGGAGCATGCGGCAAGCTTTCAGAGAGAG 2459
Db 136 AGGAGCGCGGATGTGCGACAGACTTTCAGTGTGGAGCATGCGGCGGCTTTCAGAGAGAG 77
Qy 2460 TCCTCTCAAGGCCAAGTACAGTGTGAACGCT 2493

Db 76 TCCTGTCAAGGCCAAGTACAGTGGTGAACCT 43

|||||

RESULT 7

US-09-345-214-15

; Sequence 15, Application US/09345214

; Patent No. 6392120

; GENERAL INFORMATION:

; APPLICANT: Lightner, Jonathan E.

; APPLICANT: Broglie, Karen E.

; TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE

; TITLE OF INVENTION: EXPRESSION TO PRODUCE STARCHES IN GRAIN CROPS

; FILE REFERENCE: BE-1147

; CURRENT APPLICATION NUMBER: US/09/345,214

; CURRENT FILING DATE: 1999-06-30

; EARLIER APPLICATION NUMBER: 060/094,436

; EARLIER FILING DATE: 1998-07-28

; NUMBER OF SEQ ID NOS: 20

; SOFTWARE: Microsoft Office 97

; SEQ ID NO 15

; LENGTH: 2019

; TYPE: DNA

; ORGANISM: Zea mays

US-09-345-214-15

Query Match 43.8%; Score 1245.2; DB 3; Length 2019;

Best Local Similarity 84.5%; Pred. No. 4,6e-257;

Matches 1397; Conservative 2; Mismatches 255; Indels 0; Gaps 0;

Qy 840 CGCCGCTGAGACCCCGCTGTACAAGAACCTTTGGAGACTTCAAGAAATACATTGGCT 899

Db 109 CTCTCAAGTTGAGCCATTATACAGAGGCCACTTTGGGATTTCAAGAAATACATCGCTT 168

Qy 900 TCGAGAGCCCGTGGAGGCCAAGGATATGGCTGGCTGTTCAGATGATCGGGCTCT 959

Db 169 TTGACGAGCTGAGAGAGCGAAGGATATTCAGGGTGGTGAGATGATCGCTGCTT 228

Qy 960 TTGAACATCACAGAACATGATTCGGGACTTTGGGAGGAGAGAACGTATGAACGTGG 1019

Db 229 TTGAACATTTATGGGAGCAATGATTCGGGCTTTGGCGGGGAGAAATGTTATGAACGTGA 288

Qy 1020 TCGTGTGGCTGTGAATGTTCTCCCTGTGTGCAAAACAGGTGCTTGAAGATGGCCG 1079

Db 289 TCGTGTGGCTGTGAATGTTCTCCCTGTGTGCAAAACAGGTGCTTGAAGATGGTGG 348

Qy 1080 GTGCTTGTCCCAAGGCTTTGGCGAAGAGAGACATCGTGTATGTTGTGTACCAAGT 1139

Db 349 GAGCTTATCCCAAGGCTTTAGCGAAGAGAGACATCGTGTATGTTGTGTGTACCAAGT 408

Qy 1140 ATGGGAGCTATGAGGAAGCTTACATGTCCGAGTCCGAAAATATCAAGGCTGTGGAC 1199

Db 409 ATGGGAGCTATGAGGAAGCTTGTGATATGGGAATCCGAAAATATCAAGGCTGTGGAC 468

Qy 1200 AGGATATGAGAGTGAATTTATTCATGCTTATATGATGAGTGAATTTGTGTTCAATG 1259

Db 469 AGGATATGAGAGTGAATTTATTCATGCTTATATGATGAGTGAATTTGTGTTCAATG 528

Qy 1260 AGCTCTCTCTTCCGACACCGCCAGAGAACATTTATGGGGGCGAGACAGAGAAATTA 1319

Db 529 ATGCCCCCTTTTCCGACACCGTCAAGATGACATATATGGGGGAGATAGGAGAGAAATCA 588

Qy 1320 TGAAGCGCATGATTTTGTCTGCAAGGCCGCTGTGAGAGTTCTTGGCAAGTTCCATGCG 1379

Db 589 TGAAGCGCATGATTTTGTCTGCAAGGCCGCTGTGAGAGTTCTTGGCAAGTTCCATGCG 648

Qy 1380 GCGGTGCTCCCTTATGGGAGTGAATATGAGTTTATTTGCAAAATGATGGACACGCGAC 1439

Db 649 GTGTGTGTGTCTACGAGATGAGAAATTTGTGTTCAATTTGGCAATGATGGACACCTCAC 708

Qy 1440 TCCTGCTGTCTATCTGAAGCATATTTACAGGACCATGTTGATGACAGTACCTCGCT 1499

Db 709 TCCTGCTGTCTATCTGAAGCATATTTACAGGACCATGTTGATGACAGTACCTCGCT 768

Qy 1500 CCATTATGTGATATCATTAACATGCGGACCAAGAGGCGGTGGCCAGTATGAATTCCTCT 1559

Db 769 CCGTCTGTGATATCATTAACATGCGGACCAAGAGGCGGTGGCCAGTATGAATTCCTCT 828

Qy 1560 TCACCGAGTGTGCTGAGCACTACCTGGAACATTCAGACTGTATGACACCCCGTGGGTG 1619

Db 829 ACATGAGCTTGTGCTGAGCACTACCTTCAACATTTCCAGCTGTATGATTCCTCGTGGCG 888

Qy 1620 AGCAGCCAACTACTTGTGCGCGCGGCTGAAATGTCGAGCAAGTGTCTGTGTGAGCC 1679

Db 889 AGCAGCCAACTACTTGTGCGCGCGGCTGAAATGTCGAGCAAGTGTGTGTGTGAGCC 948

Qy 1680 CCGGCTACCTGTGGAGCTCAAGAGGCTGAGAGGCGGCTGTGGGCTTCAAGCAATCATAC 1739

Db 949 GCGGCTACCTGTGGAGCTCAAGAGGCTGAGAGGCGGCTGTGGGCTTCAAGCAATCATAC 1008

Qy 1740 GGCAGAACGACTGGAAGACCGCGCATCTGTCAACGCGCATGCAACATGAGAGTGAACC 1799

Db 1009 GTTCTAAGACTGGAAGATCAATGGCATCTGTGAACGCGCATGCAACATGAGAGTGAACC 1068

Qy 1800 CCGAGTGAAGCTTCACCTCAAGTGGAGCGCTTACCAACTTCTCCCTGGGAGCCTGG 1859

Db 1069 CCAAGTGAAGCTTCACCTCGGTCGAGCGGCTTACCAACTACTCTCCCTGAGACACTCG 1128

Qy 1860 ACTCCGCAAGCGGCACTGCAAGAGAGCGCTTGAAGCGCGGCTGTGGGCTGTGAGTCCGCG 1919

Db 1129 ACGTGTGAAGCGGCACTGCAAGAGCGGCTTGAAGCGCGGCTGTGGGCTGTGAGTCCGCG 1188

Qy 1920 CCGAGTGGCGCTGTGCTGCTTCACTGCGCGGCTGTGAAGCGGCAAGAGCGTGAAGATCA 1979

Db 1189 ACGAGTGGCGCTGTGCTGCTTCACTGCGCGGCTGTGAAGCGGCAAGAGCGTGAAGATCA 1248

Qy 1980 TCGGAGCGCATGCTGTGATGTGAGCGAGAGCGTGAAGCTGTGTATGCTGTGGCAACG 2039

Db 1249 TCGGAGCGCATGCTGTGATGTGAGCGAGAGCGTGAAGCTGTGTATGCTGTGGCAACG 1308

Qy 2040 GCGGCGCAAGCTGTGAGAGATGCTGTGGGCACTTTCAGCGGAGACCAAGCAAGTGGC 2099

Db 1309 GCGGCGCAAGCTGTGAGAGATGCTGTGGGCACTTTCAGCGGAGACCAAGCAAGTGGC 1368

Qy 2100 GCGGCTGGGTGGGCTTCTCCGTGGCGCTGTGAGCGACCGGATCAAGCGGCGCGGACCGC 2159

Db 1369 GCGGCTGGGTGGGCTTCTCCGTGGCGCTGTGAGCGACCGGATCAAGCGGCGCGGACCGC 1428

Qy 2160 TCCTCATGCTCTCCCGGTTGAGCCGTGCGGGTGAACCAAGCTTACGCGATGGCTTACG 2219

Db 1429 TGGTGAATGCCCTCCCGTTGAGCCGTGCGGGTGAACCAAGCTTACGCGATGGCTTACG 1488

Qy 2220 GCACCGTCCCGTGTGTGACGCGGCTGCGGGGTGAAGGACACCTGTGCGGCTTTCGAC 2279

Db 1489 GCACCGTCCCGTGTGTGACGCGGCTGCGGGGTGAAGGACACCTGTGTGCGGCTTTCGAC 1548

Qy 2280 CTTTCAACCACTCGGCGCTGCGGGTGAAGCTTTCGACCGCGCGGAGGCGCAAGCTGATCG 2339

Db 1549 CTTTCAACCACTCGGCGCTGCGGGTGAAGCTTTCGACCGCGCGGAGGCGCAAGCTGATCG 1608

Qy 2340 AGGCGCTCGGCACTGTCTCCGACCTTACCGGAGCTTACAGAGAGCTGAGAGGCGCTCC 2399

Db 1609 AGGCGCTCGGCACTGTCTCCGACCTTACCGGAGCTTACAGAGAGCTGAGAGGCTTCC 1668

Qy 2400 AGGAGCGCGGCACTGTGTGAGAGCTTACAGCTGTGAGAGCTGCGGCAAGCTTACAGAGAG 2459

Db 1669 AGGAGCGCGGCACTGTGTGAGAGCTTACAGCTGTGAGAGCTGCGGCAAGCTTACAGAGAG 1728

Qy 2460 TCCTCTCAAGGCGCAAGTACAGTGTGAGAGCT 2493

Db 1729 TCCTCTCAAGGCGCAAGTACAGTGTGAGAGCT 1762

RESULT 8

US-09-743-980-15

; Sequence 15, Application US/09743980

Patent No. 6570008
GENERAL INFORMATION:
APPLICANT: E. I. du Pont de Nemours and Company
TITLE OF INVENTION: MODIFICATION OF STARCH BIOSYNTHETIC ENZYME GENE
TITLE OF INVENTION: EXPRESSION TO PRODUCE STARCHES IN GRAIN CROPS
FILE REFERENCE: BB-1147-A
CURRENT APPLICATION NUMBER: US/09/743,980
CURRENT FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: 060/094,436
PRIOR FILING DATE: 1998-07-28
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Microsoft Office 97
SEQ ID NO 15
LENGTH: 2019
TYPE: DNA
ORGANISM: Zea mays
US-09-743-980-15

Query Match 43.8%; Score 1245.2; DB 4; Length 2019;
Best Local Similarity 84.5%; Pred. No. 4.6e-257;
Matches 1397; Conservative 2; Mismatches 255; Indels 0; Gaps 0;

QY 840 CCGCCCTGCAAGCCCGCTGTACAGAGACCTTTGGGACTTCAAGAAATACATTGGCT 899
DB 109 CTCCTACAGTTGAGCCATTAGTACAGAGGCCACTTGGGATTTCAAGAAATACATCGGTT 168
QY 900 TCAGAGAGCCCGTGGAGGCCAAGATGATGCTGGGCTGTTGACAGATGATGCGGCTCT 959
DB 169 TTGACGAGCCTGACGAGAGCGAAGATGATTCAGGAGTTGGTGCAGATATGCTGTTCTT 228
QY 960 TTGAACATCACAGAACCATGATTCGGACCTTTGGAGGGAGAACGTCAATGAACGTGG 1019
DB 229 TTGAACATTATGGGAGCAATGATCTGGGCCCTTTGGCGGGAGAAATGTTAAGAACGTGA 288
QY 1020 TCGTGTGCTGCTGCTGAATGTTCTCCCTGTGTGCAAAACAGTGTCTTGGAGATGTGGCG 1079
DB 289 TCGTGTGCTGCTGCTGAATGTTCTCCATGTGTGCAAAACAGTGTCTTGGAGATGTGGCG 348
QY 1080 GTGCTTTCGCCAAGCTTTGGGAGAGAGAGACATCGTGTATGTTGTTGTGTGACCAAGT 1139
DB 349 GAGCTTTACCCAGGCTTTAGCGAGAGAGAGACATCGTGTATGTTGTTGTGTGACCAAGT 408
QY 1140 ATGGGACTATGAGAGACCTTACGATGTGCGAGTCCGAAAATACTACAAGGCTGTGGAC 1199
DB 409 ATGGGACTATGAGAGACCTTGTGATGTGGAATCCGAAAATACTACAAGGCTGTGGAC 468
QY 1200 AGGATATGAGAGTGAATTTATTCATGCTTATATGATGAGAGTGAATTTGTGTTCATTG 1259
DB 469 AGGACTATGAGAGTGAATTTATTCATGCTTATATGATGAGAGTGAATTTGTGTTCATTG 528
QY 1260 AGGCTCTCTCTTCCGACACGCCGACAGAAACATTTATGGGGGACAGACAGAAATTA 1319
DB 529 ATGCCCCCTTTTCCGCGACCGTCAAGATGACATATATGGGGAGATGACAGAAATCA 588
QY 1320 TGAAGCGCATATTTTGTTCGACAGCGCGCTGTGAGGTTCTTTGACAGCTTCCATGCG 1379
DB 589 TGAAGCGCATATTTTGTTCGACAGGTTGCTGTGAGGTTCTTTGACAGCTTCCATGCG 648
QY 1380 GCGGTGTCCCTTATGAGGAGTGAATCTGTGTTTATGCAAAATGATGGACACAGGAC 1439
DB 649 GTGGTGTGTCTACCGAAGATGAAATTTGTGTTCATTTGCAATGATTTGGCACACTGAC 708
QY 1440 TCTGCTGCTGTCTATGAAAGCATTTACAGGACCATGTTTGTGATGACATCTCGGT 1499
DB 709 TCTGCTGCTGTCTATGAAAGCATTTACAGGACCATGTTTGTGATGACATCTCGGT 768
QY 1500 CCATTATGATGATACATTAACATCGGACACAGAGCGGTGGCCCACTAGATGAATTCGGT 1559
DB 769 CCGTCTCGTATACATTAACATCGGACACAGAGCGGTGGTCTGTAGATGAATTCGGT 828
QY 1560 TCACGAGTGTGCTGACGACTACTGGAACACTTACAGACTGTACGACCCCGTGGGTGGT 1619
DB 829 ACATGAGTGTGCTGACGACTACTTCAACATTTGAGACTGTACGATCCCGTGGGTGGG 888

QY 1620 AGACGCCAATCTTTCGCGCGCCGCTGAAAGATGCGGACCAAGTTGTCTGTGTGAGCC 1679
DB 889 AGCACGCCAATCTTTCGCGCGCGGTCTGAAAGATGCGGACCGGTTGTGTGTGAGCC 948
QY 1680 CCGGATACCTGTGGAGCTCAAGACGCTGAGAGCGCGCTGGGGCTTTCACGATCATAC 1739
DB 949 GCGGCTACCTGTGGAGCTGAAAGACAGTGGAAAGCGCGCTGGGGCTTTCACGATCATAC 1008
QY 1740 GGCAGAACGATGGAAGCCCGGCGCATCGCAACGGGATGCAACATGAGTGAAC 1799
DB 1009 GTTCTAACGACTGGAAGATTCATGTGCATCTGTAACGGGATGCAACATGAGTGAAC 1068
QY 1800 CCGAGTGAAGCTCCACCTCAAGTGCAGACGCTTACCAACATTTCTCCCTGGGAGACGCTGG 1859
DB 1069 CCAAGTGAAGCTCACTGCGGTGCGAGCGCTACCAACATCTCCCTCGAGACACTCG 1128
QY 1860 ACTCCGCAAGCGGCAAGTGCAGAGAGCGCTGACGCGGAGCTGGGCTGTGAGTCCGG 1919
DB 1129 ACGCTGGAAGCGGCAAGTGCAGAGAGCGCTGACGCGGAGCTGGGCTGTGAGTCCGG 1188
QY 1920 CCGAGTGGCGCTGCGGCTTCATCGGCGCGCTGGAACGCGGAGAGGCGTGGAGATCA 1979
DB 1189 ACGAGTGGCGCTGCGGCTTCATCGGCGCTGGAATGACAGAGAGGCGTGGAGATCA 1248
QY 1980 TCGCGAGCGCCATGCTGTGATGCGGAGCGGAGAGCTGACGCTGTGATGCTGTGGGACCG 2039
DB 1249 TCGGAGAGCGGATGCGGATGCGGAGCGGAGAGCGGAGCTGTGATGCTGTGGGACCG 1308
QY 2040 GCGGCGAGAGCTGGAAGAGATGCTGTGGGACCTTTCAGAGGAGAGACCAACAGAGTGC 2099
DB 1309 GCGGCGAGAGCTGGAAGAGATGCTGTGGGACCTTTCAGAGGAGAGACCAACAGAGTGC 1368
QY 2100 GCGGAGTGGTGGGTTCTCGTGGCGCTGAGCGGAGAGCTGACGAGGAGGCGCGAGCGG 2159
DB 1369 GCGGAGTGGTGGGTTCTCGTGGCGCTGAGCGGAGAGCTGACGAGGAGGCGCGAGCGG 1428
QY 2160 TCTCATGCTCTCCCGGTTGAGCGGCTGAGCGGAGGTTGAACAGCTTTCAGCGCATGCTG 2219
DB 1429 TGTGATGCTCTCCCGGTTGAGCGGCTGAGCGGAGGTTGAACAGCTTTCAGCGCATGCTG 1488
QY 2220 GCACCGTCCCGTGTGACGCGGCTGAGCGGAGGAGAGACCTGTGCGGCTTTCAGC 2279
DB 1489 GCACCGTCCCGTGTGACGCGGCTGAGCGGAGGAGAGACCTGTGCGGCTTTCAGC 1548
QY 2280 CTTTCAACCACTCCGCGCTGAGGAGAGTTCGACCGGCGGAGAGAGCTGAGGAGCTG 2339
DB 1549 GTTCAAGCAAGCGGCTGAGGAGAGTTCGACCGGCGGAGAGAGCTGAGGAGCTG 1608
QY 2340 AGGCGCTGAGGAGCTGCTCCGACCTTACCGGAGCTTACAGAGAGCTGAGGAGCTG 2399
DB 1609 AGGCGCTGAGGAGCTGCTCCGACCTTACCGGAGCTTACAGAGAGCTGAGGAGCTG 1668
QY 2400 AGGAGCGGAGATGCTGAGAGACTTTCAGTGTGAGAGAGCTGCGCAAGCTTTCAGAGAG 2459
DB 1669 AGGAGCGGAGATGCTGAGAGACTTTCAGTGTGAGAGAGCTGCGCAAGCTTTCAGAGAG 1728
QY 2460 TCTTCTCAAGGCAAGTACAGTGTGAGAGCT 2493
DB 1729 TCTTCTCAAGGCAAGTACAGTGTGAGAGCT 1762

RESULT 9
US-08-941-445A-8
Sequence 8, Application US/08941445A
Patent No. 6107060
GENERAL INFORMATION:
APPLICANT: Keeling, Peter
APPLICANT: Guan, Hanning
TITLE OF INVENTION: Starch Encapsulation
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Greenlee, Winner and Sullivan, P.C.

STREET: 5370 Manhattan Circle
CITY: Boulder
STATE: CO
COUNTRY: US
ZIP: 80303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/941,445A
FILING DATE: 30-SEP-1997
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/026,855
FILING DATE: 30-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Minner, Ellen P
REGISTRATION NUMBER: 28,547
REFERENCE/DOCKET NUMBER: 89-97
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 499-8080
TELEFAX: (303) 499-8089
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 2007 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: not relevant
MOLECULE TYPE: cDNA to mRNA
HYPOTHEICAL: NO
ORGANISM: Zea mays
FEATURE:
NAME/KEY: CDS
LOCATION: 1..2007
US-08-941-445A-8

Query Match 38.9%; Score 1104.6; DB 3; Length 2007;
Best Local Similarity 81.7%; Pred. No. 5.9e-227;
Matches 1340; Conservative 0; Mismatches 289; Indels 12; Gaps 5;

QY 840 CGCGGCTGAGCCCCGCTGTACAAAGAACCTTTGGGACTTCAGAAATACATTTGGCT 899
DB 374 CTCCTACAGTTGACCATTAAGTACAGAGGCACTTGGGATTTCAAGAAATACATCGTT 433
QY 900 TCGAGAGCCCGTGAAGGCCAAGATGATGGCTGGGCTGTTGAGATGATGCGGCTCCT 959
DB 434 TTGACGAGCTGACGAGGAGGAGATGATTCAGGGGTTGGTGATGATGCTGTTCTT 493
QY 960 TTGAACATCACCAAGACATGATTCGGACCTTTGGGAGGAGAAAGTCATGAACGTG 1019
DB 494 TTGAACATTA-TGGGCAATGATTTGGGCTTTG--TGGGAGAAATGTTATGAACGTGA 550
QY 1020 TCGTCTGTGTGTGATGATTTCTCCCTGCTGCTGCAAAACAGTGTCTTTGAGATGTTGCCG 1079
DB 551 TCGTGTGTGTGTGATGATTTCTCCATGTGTGCAAAACAGTGTCTTTGAGATGTTGTG 610
QY 1080 GTGCTTTGCCAAGGCTTTGGGAGAGAGACATGCTGTTATGTTGTGTGCAAGGT 1139
DB 611 GAGCTTTACCAAGGCTTTAGCAGAGAGAGACATGCTGTTATGTTGTGTGCAAGGT 670
QY 1140 ATGGGAGCTATGAGAGAGCTTACGATGTCGAGTCCGAAATACTACAGAGCTGTGAC 1199
DB 671 ATGGGAGCTATGAGAGAGCTTTGATATGGAATCCGAAATACTACAGAGCTGTGAC 730
QY 1200 AGATATGAGAGAGATTAATTTCCATGCTTATATCGATGAGTTGATTTGTGTTCAATG 1259
DB 731 AGGACCTAGAGAGATTAATTTCCATGCTTATTAATGAGATGATGCTTTGTGTTCAATG 790
QY 1260 ACGCTCTCTCTCCGACACCGCCAGAGAGACATTTATGGGGGAGAGACAGAAATTA 1319

DB 791 ATGCTCTCT--TTCCGACCGCTCAAGATGACATATATGGGGAGATGACAGAAATCA 847
QY 1320 TGAAGCCGATGATTTGTTCTGCAAGGCCGCTGTCCAGGTTCTTGGCAGTTCCATGCG 1379
DB 848 TGAAGCCGATGATTTGTTGTTGCAAGGTTCTGTGAGTTCTTGGCAGTTCCATGCG 907
QY 1380 GCGGTGCTCTTATGAGGATGAGAAATCTGTGTTTATTTGCAAAATGATTTGGCACA 1439
DB 908 GTGTGTGTGTGCTAGAGATGAGAAATTTGTTGTTTCAATTTGCAATTTGGCACA 967
QY 1440 TCTGCTGTCTATCTGAAAGCATATTACAGGACCAATGTTGATGACATGCTGCT 1499
DB 968 TCTGCTGTCTATCTGAAAGCATATTACAGAGCCATGTTATTCAGATGACCTGCT 1027
QY 1500 CCAATATGTGATATCATATATGCGGACCAAGGCGCTGTGCTGCAATGATGATTTCCCT 1559
DB 1028 CCGTCTCTGTCATATCATATATGCGGACCAAGGCGCTGTGCTGTCATATGATTTCCCT 1087
QY 1560 TCAACGAGTTGCTGAGCACTACCTGGAACACTTCAAGCTGTACACCCGCTGGTGGT 1619
DB 1088 ACATGACCTTGTGAAACATTAACCTTTCACATTTTCAAGCTGTACATCCGTGCTGCG 1147
QY 1620 AGCAGCGCACTACTTGTGCGCG--CGGCTGAAATGCGGAGCAAGTTGTGCTGTGA 1676
DB 1148 AGCAGCGCACTACTTGTGCGCGGTTGTTCTGAAGATGCGGAGCCGCTGTGCTGTCA 1207
QY 1677 GCGCGGAGTACTGTGTGAGCTCAAGCGGTGAGGCGGCTGTGGGCTTTCACGATCA 1736
DB 1208 GCGCGGCTACTGTGTGAGCTCAAGCAAGTGAAGCGGCTGTGGGCTTTCACGATCA 1267
QY 1737 TAGGCGAAGACGCTGGAAGACCGGCGCATCTGCAACCGCATGCAATGAGAGTGA 1796
DB 1268 TCGTCTTACGCTGGAAGATCATATGCAATTTGTGAACGATGCAACAGAGAGTGA 1327
QY 1797 ACCCGAGGTGAGCTGCTCACTCAAGTGGAGCGGCTTACCACTTCTCCTGGGAGCG 1856
DB 1328 ACCCGAGGTGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1387
QY 1857 TGAATCTCGGCAAGCGGCAAGTGCAGAGAGGCTTGCAGCGGAGCTGTGAGTCC 1916
DB 1388 TCAACCTGGAAGCGGCAAGTGCAGAGAGGCTTGCAGCGGAGCTGTGAGTCC 1447
QY 1917 GCGCGGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1976
DB 1448 GCGAGCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1507
QY 1977 TCAATCGGAGCGGCAAGCTTGTGATGATGATGATGATGATGATGATGATGATGATGAT 2036
DB 1508 TCAATCGGAGCGGCAAGCTTGTGATGATGATGATGATGATGATGATGATGATGATGAT 1567
QY 2037 CCGGCGGCAAGCACTGGAAGATGCTGTGAGCACTTGCAGCGGAGCAACAGACAGCAAG 2096
DB 1568 CCGGCGGCAAGCACTGGAAGATGCTGTGAGCACTTGCAGCGGAGCAACAGACAGCAAG 1627
QY 2097 TGGCGGAGTGTGAGGCTTCTCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2156
DB 1628 TGGCGGAGTGTGAGGCTTCTCGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1687
QY 2157 CCGTCTCATAGCTTCCCGGTTGAGCGGAGGTTGAACCAAGCTTTACGCAATGAGCT 2216
DB 1688 TGGTGTGATGCTTCCCGTTG--CGGCGGAGCTGAACAGCTTACGCAATGAGCT 1744
QY 2217 ACAGGACCGTCCCGTGTGACGCGGTGCGGAGGTTGAAGGACACGCTGCGCGCTTGC 2276
DB 1745 ACAGGACCGTCCCGTGTGACGCGGTGCGGAGGTTGAAGGACACGCTGCGCGCTTGC 1804
QY 2277 ACCCTTCAACCACTCCGCTGTGAGTGTGACCGGCTGAGGAGGAGGAGCAACTGA 2336
DB 1805 ACCCTTCAACCACTCCGCTGTGAGTGTGACCGGCTGAGGAGGAGGAGCAACTGA 1864
QY 2337 TCGAGGCGCTCGGAGCACTGCTCCGCACTACCGGAGCTTACAGAGAGTGAAGGAGCC 2396
DB 1865 TCGAGGCGCTCGGAGCACTGCTCCGCACTACCGGAGCTTACAGAGAGTGAAGAGTC 1924

QY 2037 CCGGCGCGCAGACTGAGAGCATGCTGCGGCACTTGAAGCGGAGACCAACGCAAGG 2096
Db 1383 CCGGCGCGCAGACTGAGAGCATGCTGCGGCACTTGAAGCGGAGATCCAAAGG 1442
QY 2097 TGGCGCGGATGAGGATGCTTCCGTCGCGCTGCGGCAACCGGATCAAGCGCGCGCGG 2156
Db 1443 TGGCGCGGATGAGGATGCTTCCGTCGCGCTGCGGCAACCGGATCAAGCGCGCGG 1502
QY 2157 CGCTCTCATGCTCTCCCGGTCGAGCCGTCGCGGTCGAACCACTTACCGCATGCGCT 2216
Db 1503 TGGCTGATGATGCTCTCCCGGTCGAGCCGTCGCGGTCGAACCACTTACCGCATGCGAT 1559
QY 2217 ACCGCAACCGTCCCGGTCGAGCCGTCGCGGTCGAGGAGAACCGGTCGCGCTTTCG 2276
Db 1560 ACCGCAACCGTCCCGGTCGAGCCGTCGCGGTCGAGGAGAACCGGTCGCGCTTTCG 1619
QY 2277 ACCGCTTCAACCACTCCGCGCTCGGTCGAGCTTCAACCGCGCGCGGAGCGCAAGCTGA 2336
Db 1620 ACCGCTTCCGCGGAGCGCGGCTCGGTCGAGCTTTCGACCGCGCGGAGCGCAAGCTGA 1679
QY 2337 TCGAGCGCTCGGCGCACTGCTCCGCACTACCGGGACTACAGAGAGAGCTGAGGGGCC 2396
Db 1680 TCGAGGTCGTCAGGCACTGCTCCGCACTACCGGGACTACAGAGAGAGCTGAGAGATC 1739
QY 2397 TCGAGGCGCGCGGATGTCGAGAGACTTTCAGCTGCGGAGCATGCGCGCAAGCTTACGAGG 2456
Db 1740 TCGAGGCGCGCGGATGTCGAGAGACTTTCAGCTGCGGAGCATGCGCGCTGAGAGG 1799
QY 2457 ACGTCTCTCTCAAGGCGCAAGT 2477
Db 1800 ACGTCTCTCTCAAGTACCAAGT 1820

RESULT 11

US-08-941-445A-10
Sequence 10, Application US/08941445A
Patent No. 6107060

GENERAL INFORMATION:

APPLICANT: Keeling, Peter
APPLICANT: Guan, Hanning
TITLE OF INVENTION: Search Encapsulation
NUMBER OF SEQUENCES: 37

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Greenlee, Winner and Sullivan, P.C.
STREET: 5370 Manhattan Circle
CITY: Boulder

STATE: CO

COUNTRY: US
ZIP: 80303

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/941.445A
CLASSIFICATION: 800
FILING DATE: 30-SEP-1997

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/026,855
FILING DATE: 30-SEP-1996

ATTORNEY/AGENT INFORMATION:
NAME: Winner, Ellen P
REGISTRATION NUMBER: 28,547
REFERENCE/DOCKET NUMBER: 89-97

TELEPHONE: (303) 499-8080
TELEFAX: (303) 499-8089

INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 2097 base pairs
TYPE: nucleic acid

STRANDEDNESS: double
TOPOLOGY: not relevant
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Zee may
FEATURE:
NAME/KEY: CDS
LOCATION: 1..2097
US-08-941-445A-10

Query Match 36.9%; Score 1047.6; DB 3; Length 2097;
Best Local Similarity 78.7%; Pred. No. 9,6e-215;
Matches 1264; Conservative 0; Mismatches 339; Indels 3; Gaps 1;

QY 886 GAAATACATTTGGCTTCGAGAGACCCGTCGAGGCGCAAGATGATGCTGGCTTTCAGA 945
Db 492 GAAATACATTTGGCTTCGAGAGACCCGTCGAGGCGCAAGATGATGCTGGCTTTCAGA 551
QY 946 TGATGCGG---GCTCTTTGATACATCACAGAACCATGATTCGGACCTTTGGAGGGA 1002
Db 552 TGGCGCGGCGAGTGTCTCTTATGACAGGAGATGATGAACTGGCCCTTTGGCTGGGCC 611
QY 1003 GAACGTATGAACTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1062
Db 612 TAAATGATGAACTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 671
QY 1063 TCTTGAAGATGTTGCGCGGCTTTTGGCCAAAGCTTTTGGCGAGAGAGACATCGTTTAT 1122
Db 672 CTTGAGAGATGTCGTGGGCTTTTGGCTTAAAGCTTGGCGAGAGAGACATCGTTTAT 731
QY 1123 GGTGTGTATACCAAGATGATGAGGAGCTATGAGAGAGCTTGAAGTCCGAAATA 1182
Db 732 GGTGTGTATACCAAGATGATGAGGAGCTTGAAGTCCGAAATA 791
QY 1183 CTACAGGCTGCTGCGACAGGATATGAAATGATTTTTCATGCTTATTCATGAGT 1242
Db 792 TTACAGGATGCTGCGACAGGATATGAAATGATTTTTCATGCTTATTCATGAGT 851
QY 1243 TGAATTTGTTGTTATTTGACGCTCTCTCTTCCGACACCGCGAGAGACATTTATGGGG 1302
Db 852 TGAATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 911
QY 1303 CAGCAGACAGAAATTTATGAAAGGATGATTTTGTTCGACAGGCGCTGTGAGTTCC 1362
Db 912 AGAAAGATGATGATTTTGAAGGATGATTTTGTTCGAGGCGCTGTGAGTTCC 971
QY 1363 TTGGCAAGTTCAGTGGCGGCGGTGCTCTTATGAGGATGAAATGTTGTTTATGCAAA 1422
Db 972 ATGATATGCTTCAGTGGCGGCGGTGCTCTTATGAGGATGAAATGTTTTCATGCTTAA 1031
QY 1423 TGAATGCGACAGGCACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1482
Db 1032 TGAATGCGACAGGCACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1091
QY 1483 GATGAGTACACTGCGGCTCATTTATGATGATGATGATGATGATGATGATGATGATGATG 1542
Db 1092 GATGAGTACACTGCGGCTCATTTATGATGATGATGATGATGATGATGATGATGATGATG 1151
QY 1543 AGTATGATGATTTCCCGTTCACCGAGTGGCTGAGCACTTACCTGGAACACTTTCAGACTGTA 1602
Db 1152 TGTAGAGACTTGTGCAATTTTGACTTGTGCTGAGACATGACATGACATGCACTTCAAACTGTA 1211
QY 1603 CGAAGCGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1662
Db 1212 TGACAACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1271
QY 1663 GGTGTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1722
Db 1272 GGTGTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1331
QY 1723 GCTTACGATCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1782

Db	1332	CCTCCAGACATCATTAACACAGAAACGACTGGAAAGCTGCAGGGGCATCTGGAAACGGCATGCA	1391
QY	1783	CAACATGAGCTGGAAACCCCGAGGTGGACGTCCACTCAATGTCGACGGCTACACCACTT	1842
Db	1392	CATGAGCCAGTGGAAACCCCGCTGTGGACGTGCACCTCCACTCCGACGACTACCAACTA	1451
QY	1843	CTCCCTGGGGACCGCTGGACCTCCGGCAACGGCAGTGCAGAAAGAGCCCTGCAGCCGAGACT	1902
Db	1452	CACGTTGAGAGGCTGGAAACCCGGCAAGGAGTGCAAAGGCGCCCTGCAGCCGAGACT	1511
QY	1903	GGGCTTGAGAGTCCGCGCCGACGTGCGCTGTCCGCTTCAATCGGCCCTGCAGCGGCA	1962
Db	1512	GGGCTTGAGAGTCCGCGCGACGAGAGTGCACCTAGTCGGGTTCAATCGGCCGCTGCAGCACCA	1571
QY	1963	GAAAGGCGTGGAGATCATTCGGGAGACGCATCGCTCCGTGATCTGAGCCAGAACGTGACCT	2022
Db	1572	GAAAGGCGTGGACATCATTCGCCAGCGCATCCACTGATATCGCGGGGACAGAACGTGACCT	1631
QY	2023	GGTATAGTGGGACACGGGCGCCGACACCTGGAGAGCATGCTCGCGGCACTTCAGCGGGA	2082
Db	1632	CGTAGTGTGGGACACGGGCGCGGCGCGACCTGGAGAGCATGCTCGCGCGGTTGAGTCGA	1691
QY	2083	GCACCAACAGAAAGTGCAGCGGCTGGGTTCTCCGTCGCGCTCGGGCACCCGATCAC	2142
Db	1692	GCACAGCCACAAAGTGCAGCGCGCGGTGGGTTCCTCGGTGCCCTTCGGCACCCGATCAC	1751
QY	2143	GGCGGGCGCGAACCGGCTCTCATGCTCCCTCCGGTTTCGAGCCGTGCGGGTTGAACCACT	2202
Db	1752	GGCGGGCGCGGACATCTGAGTATGCTGATGCTCGGTTTCGAGCCGTGCGGGCTGAACCACT	1811
QY	2203	TTAGCCCATGGCTTACGGCACCGTTCCTCGTGTGCACGCCTCGCGGGGTGAGGAGCAC	2262
Db	1812	CTAGCCCATGGGTATCGGAGCCGTGCTCCGTGTGCACGCCTGGGGGGGCTTCGGGACAC	1871
QY	2263	CGTGCCTGCTTTCGACCCCTTCAACCACTCCGGGCTCGGGTGGAGAGTTCGACCCGGCGGA	2322
Db	1872	GGTGGCGCTGTCCAGCCCTTTCACAGAACACCGGCTCGGGTGGAGAGTTCGACCCGGCGGA	1931
QY	2323	GGCGCACAAAGTGTATCGAGGCGTTCGGGACACTGCTTCGCACTCAACCGGACCTAACAGGA	2382
Db	1932	GGCGAACCGGATGATCGACGGGCTTCGCACTGCTTCAACACGTAACCGGAACCTACAGGA	1991
QY	2383	GAGCTGAGGGGCTTCAGAGACCGGCGATGTCGAGGACTTCAGACTGGAGCATGCGCG	2442
Db	1992	GAGCTGGGCGCTTCGAGGCGCGCGGCGCATGAGCCGAGGACCTCAAGCTGGAGCACACGCGC	2051
QY	2443	CAAGCTACAGAGACGTCCTCTCAAGCCCAAGTACCAAGTGTGA	2488
Db	2052	CGTCTGTATAGGACGTGCTGTTCAGAGGCAAGTACCAAGTGTGA	2097

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1 COMPUTER: IBM PC compatible
2 OPERATING SYSTEM: PC-DOS/MS-DOS
3 SOFTWARE: Patent In Release #1.0, Version #1.25
4 CURRENT APPLICATION DATA:
5 APPLICATION NUMBER: US//08/572,951
6 FILING DATE: 15-DEC-1995
7 CLASSIFICATION: 800
8 PRIOR APPLICATION DATA:
9 APPLICATION NUMBER: 08/346,602
10 FILING DATE: 29-NOV-1994
11 CLASSIFICATION: 800
12 PRIOR APPLICATION DATA:
13 APPLICATION NUMBER: 08/263,921
14 FILING DATE: 21-JUN-1994
15 CLASSIFICATION: 800
16 ATTORNEY/AGENT INFORMATION:
17 NAME: Paul N. Kokulis
18 REGISTRATION NUMBER: 16,773
19 REFERENCE/DOCKET NUMBER: 222957/1.02.15C
20 TELECOMMUNICATION INFORMATION:
21 TELEPHONE: (202) 861-3000
22 TELEFAX: (202) 822-0944
23 INFORMATION FOR SEQ ID NO: 3:
24 SEQUENCE CHARACTERISTICS:
25 LENGTH: 2380 base pairs
26 TYPE: nucleic acid
27 STRANDEDNESS: both
28 TOPOLOGY: linear
29 MOLECULE TYPE: CDNA
30 US-08-572-951-3

```

RESULT 12
 US-08-572-951-3
 ; Sequence 3, Application US/08572951
 ; Patent No. 5824790
 ; GENERAL INFORMATION:
 ; APPLICANT: KEELING, PETER L.
 ; APPLICANT: KNIGHT, MARY E.
 ; APPLICANT: GUAN, HANPING
 ; TITLE OF INVENTION: MODIFICATION OF STARCH
 ; TITLE OF INVENTION: SYNTHESIS IN PLANTS
 ; NUMBER OF SEQUENCES: 41
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: CUSHMAN DABY & CUSHMAN
 ; ADDRESSEE: Intellectual Property Group of
 ; ADDRESSEE: Pillsbury Madison & Sutro LLP
 ; STREET: 1100 New York Avenue, N.W.
 ; CITY: Washington
 ; STATE: DC
 ; COUNTRY: USA
 ; ZIP: 20005-3918
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk

	Query Match	32.1%; Score 912.2; DB 1;	Length 2380;
	Best Local Similarity	53.4%;	Pred. No. 1e-185;
	Matches	858; Conservative	291; Mismatches 454; Indels 3; Gaps 1;
Oy	888	AATACATTGGCTTGCAGAGAGCCCGTTGAGGCCAAGATGATGTGCTGGGCTGTTGCAGATG	947
Db	551	ARMENATHTGHNAITHGNCNGARFCNCGNTMAYGCMAARGCNGAYGCGNCNCNCGNACNGAYG	610
Oy	948	ATGGGGGCTCCTTTGAACATCAC--ASAACCATGAPTCCGSACTTTGGCSAGGGAGA	1004
Db	611	CNCGNCGMSNGCNCCNTTAIYAHVINGNARKAYAAHARCNGSNCNYTNGCNGSNCNA	670
Oy	1005	ACGTCATGAACGTGTGTCGTGGCTGCTGTAATGTTCTCCCTGGTGCAAAAAGGTGTC	1064
Db	671	AYGNMAGAAAGTGTGTGTGTGTGTCNNNSNGARTGYCNCCTTYTGYAAABACNGBNGANY	730
Oy	1065	TTGSAGATGTGGCCGGGTCTTTGGCCAAGCTTTGGSGAAGAGAGCATCGTGTATGG	1124
Db	731	TNGSNGAVTGTGTGNGGNCNTTNCNBARCNYTNGCMGMNGSCAHVMGNTNATGG	790
Oy	1125	TTGTGTGTAACCAAGGTATGGGACTATGAGGAAGCCTAGATGTGGAATCCGAATAACT	1184
Db	791	TGNTNATHCHCMGWTAYAGNGARFAPAYCNGARGCMNGNAVYTGTGNGTNMGNNMGNT	850
Oy	1185	ACAAGGCTGTGCGACAGANTATGGAAGTAAATTTCCACGTCCTTATATGATGCAATGG	1244
Db	851	AYARGTNGCNGCAGAYMSNGARGTMACNTAYTYICAWSTATATHTGAYGANGNG	910
Oy	1245	ATTTTGTGTTCAITGACGCTCTCTCTTTCGACACCSCCAGAGAATTCATTTGGGGCA	1304
Db	911	AYTTYGTNTTYGTNGARGCNCNCNTTMYGNCAMVNCAVAAYAATHTAYGONGNG	970
Oy	1305	GCAACAGGAATATATGAAGGCAATGTTTTGTTCTGCAAGGCCGCTGTGAGGTTCTT	1364
Db	971	ARMENYNTNGAIAHTHYAARWGANATGATHTNTTYTYYAARGCNGCNTNGARJNCNT	1030
Oy	1365	GGCAGCTTTCATGCGGGCGGTGCCCTTATGAGGAGTGAATACTGTGTTTATTCGAATG	1424
Db	1031	GGTAHVCNCNTGYGGNGANACNETNTNAYGNGNAVYSMAAYTNTGNTTTHHCNAYG	1090
Oy	1425	ATTGGCACAGGCACTCTCTGCTGTATCTGAAAGCATATTCAGGAGCCATGTTGA	1484

1091 AYTGGCAVACNCGNCTYNTNCCNGTNTAYTNAARGCNTATAYMNGAAYAGNYTNA 1150
1485 TGCAGTACACTCGGTCATTATGAGTATACATACTCGCCACGAGCGCGTCCAG 1544
1151 TGCARTYAGCNMGWNGTNTNTGNTNATHCAVAAVATHGNCACARAGNNGNCCNG 1210
1545 TAGATGATTCCTCCCTTCAACCGAGTTGCTGAGCACTACCTGGAACACTTACAGCTGACG 1604
1211 TNGAYGATTTGTMAATTTTAYATTCNCGARCAVTAATHTGACATTTTAARTTNTAYG 1270
1605 ACCCGGTGGTGTGAGACGCCCAACTACTTCCGCGCGCGCTGAAGATGGCGGACGAG 1664
1271 AYAATATHTGGNGGNGAYCAVMSNAAYGTTNTTGGCNGCGNGYNTAARACNCGNAYMNG 1330
1665 TTGTCGTGTGTGAGCCCGCGGTACTGTGGGAGCTCAAGACCGTGTGAGGCGCGCTGGGGGC 1724
1331 TNGTNAACNGTMSNAAYGGNTAATVATGTGGARVNTAATAACWMSNGARNGNTGGGNGY 1390
1725 TTCAAGCATCATATCGGCGGACGAGACGAGTGAAGACCCGCGCATGCTCAACGGCATGACA 1784
1391 TNCAYGATHTAHTAATCAABAAYATGTGAARYNCARAGNAHTGTNAATHTGATYA 1450
1785 ACATGAGTGAACCCCGAGGTGACGTCACTCAAGTGGACGCGCTTACCAACTTCT 1844
1451 TGMNGARTGGAAYCCNCGNCGTNGAYGTNCAYTNCAYMSNGAYGATYAACNAAYTAYA 1510
1845 CCCGTGGGACCGCTGAGACTCCGCGCAAGCGGCGAGTGTCAAGAGAGCCCTGACGCGGACGCTG 1904
1511 CTTTGGARACCTNTGAYAACNMGNAARMGNCARTYAAAGCNGCNGCTTTCABMGNCARVYNG 1570
1905 GCCTGACAGTCTCCGCGCGGACGCTGCGCTGCTCGGCTTCACTGCGCGCGCTGACGCGGAGA 1964
1571 GNTTNCARGTMTMGATGAYATTCNCTNTATHGNTTATHTGMMGNTTNGAYCAVCA 1630
1965 AGGCGGTGAGATCATGCGCGGACGCACTGCGGTGATCTGTGAGCAGAGACGTGACGCTG 2024
1631 ARGGNGTNGAYATHTATGCMGAYGCNATHCAVGTGATHTGCMGACAGAYGTNCARVYNG 1690
2025 TCATGCTGGGACCGCGCGGCGGACGCTGAGAGAGATGCTGCGGCACTTGCAGCGGAGAC 2084
1691 TNAAGTNTGNAACNMGNGMNGCNGAYTNGARGAATGYTMMGMGNTTTCABMSNGAR 1750
2085 ACCGACGACAGGTGCGCGGCTGGGTTCTCGTGGCGCTGCGCGGACGAGTCA 2144
1751 AYSNNGAYAAAGTMMGNCNTGGTNGANTTYSNGNTCCNYTNGCNAATMGNAHTHACNG 1810
2145 CGGCGCGGACGCGCTCTCATGCTCTCCGCTTCAAGCCGTGCGGCTTGAACGAGCTT 2204
1811 CNGGNGCNGAYATHTYNTATGTCNMSNMGNTTTCARCCNTGYGNTTNAAYCARVYNT 1870
2205 ACCGATGCGCTTACGAGCAGCTCCCTCGTGCACGCGCTGCGGCGGTGAGGACACCG 2264
1871 AYGNAATGAGCTATGAGNACNGTNCNGTNGTNCAYGCGTNGGNGGYTMMGNAAYACNG 1930
2265 TGGCGCGGTTGAGACCCCTTCAACCACTCCGCGCTCGGTTGAGCTTGAACCGCGCGAG 2324
1931 TNGCNCNTTTCATTCNTTAAATGAYACNNGNNTNGTGAACCTTTCATGAGNCCNARG 1990
2325 CGCACAAGTGTATGAGGCGCTCGGAGCATGCTCCGACCTTACCGGAGACTCAAGAGA 2384
1991 CNAAYMGNATGATHTGATGCTATGNTMSNCAATGYTNAACNACTATATMGNAATYTAARBARW 2050
2385 GCTGGAGGCGCTTCAAGAGCGCGCATGTCGACAGACTTCACTGGAGAGATCCGCCA 2444
2051 SNTGSMNGCNTGTGNGCNGNNGNATGCGNGARGAAYTTMWSNTGGAYAYCNGCNG 2110
2445 AGCTCTACGAGAGCTCTCTCAAGGCAAGTACAGTGGTGAAC 2490
2111 TTYTNTATGAGAGATGNTTNGTNAARGNAATATVCAATGSTRGC 2156

Sequence 25, Application US/09388743
Patent No. 642386
GENERAL INFORMATION:
APPLICANT: Singletary, George
TITLE OF INVENTION: Zhou, Ian
TITLE OF INVENTION: No. 642386el Starch Synthase Polynucleotides and Their
FILE REFERENCE: 1144
CURRENT APPLICATION NUMBER: US/09/388, 743
CURRENT FILING DATE: 1999-09-02
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 25
LENGTH: 2418
TYPE: DNA
ORGANISM: Typha latifolia
FEATURE:
NAME/KEY: CDS
LOCATION: (1)...(2418)
US-09-388-743-25

Query Match 28.4%; Score 806.6; DB 3; Length 2418;
Best Local Similarity 70.7%; Pred. No. 4.1e-163;
Matches 1073; Conservative 0; Mismatches 444; Indels 0; Gaps 0;

972 AGAATCATATCCGACCTTTGCGAGGAGAACTCATGAACGTGCTCGTGGCTG 1031
638 AAAATGAGTTCCTTCTTCTGCTGGCGAAATGTCATGAACATCATGTGCTG 697
1032 CTGAATGTTCTCCCTGTGCAAAAACAGTGTCTTGAAGATGTTGCCGTGGCCCA 1091
698 CAGATGTCTCTTGTGTCAAAACAGTGTGCTTGAAGATGTTGCAAGAGATTCGCGA 757
1092 AGGCTTGGGGAAGAGACATGCTGTATGTTGTGTGATCCAAAGTATGGGACTATG 1151
758 AGGCTTGGCAGAAAGAGACATGAGGTGATGTTGTGATGCAAGGATATGAAACTATG 817
1152 AGAAGCTACAGATGTGAGTGTCCGAATACTCAAGGCTGCTGACAGATTTGGAAG 1211
818 CTGAACCCCAAGATATGAGATCGCAAAATCTCAAGGTTCAAGGCGAGATATGGAAG 877
1212 TGAATATTTTCATGCTTATATCATGATGAGATTTTGTGTTCAATGACGCTCTCT 1271
878 TAATCTATTTTCATGCTTATATCATGATGAGATTTTGTGTTTATGATGATGACACT 937
1272 TCCGACACCGCAGAAAGACATTTATGAGGCGACAGACAGAAATATGAAAGCATGA 1331
938 TCGCTCACCGGAGGAATCGATTTATGAGGAAACGAGTGAATCTTAAACGTATGA 997
1332 TTTTGTCTGCAAGGCGGCTGTGAGGTTCTTGTGACGCTTCCATGCGGCGGTCCCTT 1391
998 TTTTGTCTGCAAGGCGGCTGTGAGGTTCTTGTGACGCTTCCATGCGGCGGTCTTGT 1057
1392 ATGGAGATGAAATCTGTGTTTATGCAATGATGAGCAACAGGCACTCTGCTGCTGCT 1451
1058 ATGAGATGATTTTGTGCTTTCATACGATGATTTGCACTGCTCTCTGCTGCTGCT 1117
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1512 TACATTAATCTGCGCACAGGCGGCTGCGGCAAGTATGATGATTTCCGTTTCAACGATG 1571
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1632 ACTTGGCGGCGGCTGGAAGATGCGGACAGGTTGTGATGATGATGATGATGATGATG 1691
1298 TTTTGTGCTGCGCTGGAAGATGCTGACCGAGTGTGATGATGATGATGATGATGATG 1357

Qy	1692	GGGAGCTCAACA	CGSTGGAGGGGCGCTGGGGGGCTTCA	CGACATCACTAACGGAACGACT	1751
Db	1358	GGGAGCTGAAAACAT	CAGAAGGTGGTGGGGCTTACATGAATTAATTAATGAAGTA	CT	1417
Qy	1752	GGAAGACCCGGCGCAT	CGTCAACCGCATTCGACAACATGAGTGGAA	ACCCGAGGTGACG	1811
Db	1418	GGAAATTCMAAGTA	TTGTAATTTGSCATTTGATGCAAAAGAGTGGAGCCCGAATTTGATG		1477
Qy	1812	TTCAACTCAAGT	CGGACGGTACACAACTTCTCTCTGGGGACGTGAC	CTTCGGCAAGC	1871
Db	1478	TGCACCTTAATTCGAT	TGATGATACAAATTAATTTCTTGATTA	CACTTTAAGATGGGTAAAC	1537
Qy	1872	GGCAGTGCAGAAGAG	CCCTGCAAGCGCGGACGTGGGCTGACAGTCCGCGCCACGCGCGC		1937
Db	1538	CAGTAATGTAAGAG	CTGCTTTTGACGACGAGAGTGGCTCTGCTGCTGTAATATGTA	CCCA	1597
Qy	1932	TGCTTCGCTTCAT	CGCGCCCTGACCGGGACGAGAGGGGCTGGAGATTCATCCGACGCA		1997
Db	1598	TCATTTCATTCATT	TGGAAGGTTAGACACACAGAAAGGGTGCATCTATTTCGACAGGCA		1657
Qy	1992	TGCCCTGATCGT	GACGAGACGTGACCTGCTCATCTGGGACCGGACCGCACGAC		2057
Db	1658	TGCCTTGATTTGCT	CAGTCATGATGTTCAAGATGATCATGTTAGGCA	CGGGGAGGCAAGAC	1717
Qy	2052	TGGAGAGATCTGT	GCGGACATTCAGCGCGGAGACACAGACAAGTGGCGGGTGGGTGG		2117
Db	1718	TTGAGAAATTA	CTGAGAACTTTGAGGGTCAACACAGGACAAAGTTAGAGCATGGTGTG		1777
Qy	2112	GGTTCTCGGT	CGGCTTGCGCACCGGATTCACGGCGGGGCGCGACGCGCTCCTCATGCGCT		2177
Db	1778	CATTTCAGTA	AAAGATGGCGCATAGAAATTAACGACAGGTGCGACATCTCATGATGCTT		1837
Qy	2172	CCGCGTTGAG	CCGTGCGGGTTGAACCAAGCTTTACGCCATGGCTTACGCAACCGTCCCG		2237
Db	1838	CGAGGTTGAG	CGCATGCGGATTTGAACCAAGCTTTACGCAATGATGATGAACCATTTCCAG		1897
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Db	1898	TGGTGCAATG	CTGTGGGGGCTTTAAGATACAGTACCTCAATTTGATCTTTTCAACGAGT		1957
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US-10-044-543-25					
Sequence 25, Application US/10044543					
Patent No. 6734341					
GENERAL INFORMATION:					
APPLICANT: Singletary, George					
APPLICANT: Zhou, Ian					
TITLE OF INVENTION: No. 6734341el Starch Synthase Polynucleotides					
TITLE OF INVENTION: and Their Use in the Production of New Starches					
FILE REFERENCE: 1144D					
CURRENT APPLICATION NUMBER: US/10/044,543					
CURRENT FILING DATE: 2002-01-11					
PRIOR APPLICATION NUMBER: 09/386,743					
PRIOR FILING DATE: 1999-09-02					
NUMBER OF SEQ ID NOS: 28					
SOFTWARE: FastSeq for Windows Version 3.0					

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; ORGANISM: Typha latifolia
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; FEATURE:
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; NAME/KEY: CDS
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; LOCATION: (1)...(2418)
;
US-10-044-543-25

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Best Local Similarity 70.7%; Pred. No. 4,1e-163;
Matches 1073; Conservative 0; Mismatches 444; Indels 0; Gaps 0;

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/ APPLICANT: Singletary, George			
/ APPLICANT: Zhou, Lan			
/ TITLE OF INVENTION: No. 6423886el Search Synthese Polynucleotides and Their			
/ FILE REFERENCE: 1144			
/ CURRENT APPLICATION NUMBER: US/09/388, 743			
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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 10, 2005, 20:46:59 ; Search time 1640 Seconds
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Title: US-10-018-418a-3

Perfect score: 2842
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Gapop 10.0 , Gapext 1.0

Searched: 6046767 seqs, 3099530249 residues

Total number of hits satisfying chosen parameters: 12093534

Minimum DB seq length: 0
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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4	2141.2	75.3	2946	19	US-10-416-439C-4	
5	2138.4	75.2	2950	19	US-10-416-439C-2	
6	2137.4	75.2	2951	19	US-10-416-439C-3	
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9	1238.6	43.6	2412	17	US-10-260-238-1034	Sequence 1034, Ap
10	1233.2	43.4	2010	17	US-10-336-753-50	Sequence 50, Appl
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13	1104.6	38.9	2007	19	US-10-628-525-8	Sequence 8, Appl1
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40	268.6	9.5	682	17	US-10-260-238-4016	Sequence 4016, Ap
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44	250	8.8	2267	10	US-09-961-077-25	Sequence 25, Appl
45	248.4	8.7	1818	21	US-10-877-645-2	Sequence 2, Appl1

ALIGNMENTS

RESULT 1
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Sequence 5, Application US/09952677
Patent No. US20020138876A1
GENERAL INFORMATION:
APPLICANT: Block, Martina
Lortz, Horst
Luticke, Stephanie
Walter, Lennart
Froberg, Claus
Kossmann, Jens
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES
FROM WHEAT WHICH ARE INVOLVED IN STARCH
SYNTHESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/952,677
FILING DATE: 14-Sep-2001

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/196,390
FILING DATE: 19-NO. US2002013876A1-1998
APPLICATION NUMBER: DE 196 21 588.9
FILING DATE: 29-MAY-1996
APPLICATION NUMBER: DE 196 36 917.7
FILING DATE: 11-SEP-1996
APPLICATION NUMBER: PCT/EP97/02793
FILING DATE: 28-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: AGREVO-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 2825 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Trifolium aestivum L.
STRAIN: cv. Florida
TISSUE TYPE: ca. 21 d Caryopses
IMMEDIATE SOURCE:
LIBRARY: cDNA library in pBluescript sk (-)
CLONE: PTAS81
FEATURE:
NAME/KEY: CDS
LOCATION: 162..2559
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
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Best Local Similarity 93.8%; Pred. No. 0;
Matches 2613; Conservative 0; Mismatches 108; Indels 66; Gaps 9;
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QY 1142 GGGGACTATGAGAGAGCTTATGATGCGAGGCGGAAATCTAAGGCTGCGAGC 1201
DB 1215 GGGGACTATGAGAGAGCTTATGATGCGAGGCGGAAATCTAAGGCTGCGAGC 1274
QY 1202 GATATGAGAGATGATTTATTCATGCTTATATGATGAGTGTGTTCAATTGAC 1261
DB 1275 GATATGAGAGATGATTTATTCATGCTTATATGATGAGTGTGTTCAATTGAC 1334
QY 1262 GCTCTCTCTTCGACACCGCGAGAGACATTTATGCGGCGAGCAGACAGAAATTATG 1321
DB 1335 GCTCTCTCTTCGACACCGCGAGAGACATTTATGCGGCGAGCAGACAGAAATTATG 1394
QY 1332 AAGCGCATGATTTGTTTGTGCAAGGCGCTGTGAGGTCTTGGCAGTTCAGTGGCG 1381
DB 1395 AAGCGCATGATTTGTTTGTGCAAGGCGCTGTGAGGTCTTGGCAGTTCAGTGGCG 1454
QY 1382 GGTGTCCCTTATGAGGATGAGAAATGTGTTTATTTAGAAATGATTTGACACGCACTC 1441
DB 1455 GGTGTCCCTTATGAGGATGAGAAATGTGTTTATTTAGAAATGATTTGACACGCACTC 1514
QY 1442 CTGCTGTCTATCTGAAAGCATTTATCAGGAGCATGTTGATGACAGTCACTCGTTC 1501
DB 1515 CTGCTGTCTATCTGAAAGCATTTATCAGGAGCATGTTGATGACAGTCACTCGTTC 1574
QY 1502 ATTATGATGATATATATATGCGGACCAAGGCGGTGGCCAGTATGATGATTTCCCGTTC 1561
DB 1575 ATTATGATGATATATATATGCGGACCAAGGCGGTGGCCAGTATGATGATTTCCCGTTC 1634

Oy	1562	ACCGATTGCCGAGACACTACCTGGAAACA	TTTCAACTGATACGACCCCGTGGTGTAG	162
Dp	1635	ACCGATTGCCGAGACACTACCTGGAAACA	TTTCAACTGATACGACCCCGTGGTGTAG	169
Oy	1622	CACGCGCACTACTTGGCGCGCGCGCTGAA	GATGCGGACAGGTTGTGCTGTGACGCC	168
Dp	1695	CACGCGCACTACTTGGCGCGCGCGCTGAA	GATGCGGACAGGTTGTGCTGTGACGCC	175
Oy	1662	GGGTACCTGTGGAGCTCAAGACGGTGA	GGGCGGCTTGGGGCTTACGACATCAACG	174
Dp	1755	GGGTACCTGTGGAGCTCAAGACGGTGA	GGGCGGCGGCTTGGGGCTTACGACATCA	181
Oy	1742	CAGAACGACTGGAAACCCGCGGCACTG	CTCAACCGGCAATCGAACATGAGTGAACCC	180
Dp	1815	CAGAACGACTGGAAACCCGCGGCACTG	CTCAACCGGCAATCGAACATGAGTGAACCC	187
Oy	1802	GAGGTGACGCTCAACTCAAGTCGAGACG	ATCCAACTTCTCCTGGAGACGCTGACAC	186
Dp	1875	GAGGTGACGCTCAACTCAAGTCGAGACG	ATCCAACTTCTCCTGAGAGACGCTGACAC	193
Oy	1862	TCCGCGAAGCGGCACTGACAGAGGCG	CCCTGCACGCGACCTTGCAGAGTCCGCGC	192
Dp	1935	TCCGCGAAGCGGCACTGACAGAGGCG	CCCTGCACGCGACCTTGCAGAGTCCGCGC	199
Oy	1922	GACGTGCGCGTCTGTGGCTTACTCGG	CGCGCTTGCACGCGGACAGAGGCGTGAAT	198
Dp	1995	GACGTGCGCGTCTGTGGCTTACTCGG	CGCGCTTGCACGCGGACAGAGGCGTGAAT	205
Oy	1982	GGGAGCGGCATAGCCCTGGATCGTGA	CCAGGACGTCGATGCTGGGGCAACCGG	204
Dp	2055	GGGAGCGGCATAGCCCTGGATCGTGA	CCAGGACGTCGATGCTGGGGCAACCGG	211
Oy	2042	CGCCACGACTGAGAGCATGTCTGGG	CACTTGCACGCGGACCAACGACAGAGGTG	210
Dp	2115	CGCCACGACTGAGAGCATGTCTGGG	CACTTGCACGCGGACCAACGACAGAGGTG	217
Oy	2102	GGGTGGGTGGGTTCTCCGTGCGCTG	CGACCCGATCACGGCGGCGCGACCGCGCT	216
Dp	2175	GGGTGGGTGGGTTCTCCGTGCGCTG	CGACCCGATCACGGCGGCGCGACCGCGCT	223
Oy	2162	CTCATGCGCCTCCCGGTTGAGCGCG	GTGAGCGGATTAAGCATGGCCCTACGCG	222
Dp	2235	CTCATGCGCCTCCCGGTTGAGCGCG	GTGAGCGGATTAAGCATGGCCCTACGCG	229
Oy	2222	ACCGTCCCGTCTGTGACGCGCTCG	CGGCGTGAAGGACACCGTGCAGCC	228
Dp	2295	ACCGTCCCGTCTGTGACGCGCTCG	CGGCGTGAAGGACACCGTGCAGCC	235
Oy	2282	TTCAACCACTCCGCGCTCGGGTGA	CGTTTCAACCGCGCCGACCAAGCTGATCG	234
Dp	2355	TTCAACCACTCCGCGCGCTCGGGTGA	CGTTTCAACCGCGCCGACCAAGCTGATCG	241
Oy	2342	GGCGTCCGGGCACTGCTTCGCGAC	CTTCAAGAGAGGTTGAGAGGGCCTCCAG	240
Dp	2415	GGCGTCCGGGCACTGCTTCGCGAC	CTTCAAGAGAGGTTGAGAGGGCCTCCAG	247
Oy	2402	GAGCGCGGCATGTGCGACGACCTT	CAGCTGAGGACATGCGCCAAAGCTCTTACG	246
Dp	2475	GAGCGCGGCATGTGCGACGACCTT	CAGCTGAGGACACCGCCAAAGCTCTTACG	253
Oy	2462	CTCTCTCAAGGCCAAGTACAGTGTGA	ACGCTAGCGCTTACAGCCCGCGCATGC	252
Dp	2535	CTCTCTCAAGGCCAAGTACAGTGTGA	ACGCTAGCGCTTACAGCCCGCGCATGC	259
Oy	2522	GTCGATGATAGAGGGGTGGAATG	GGCATTTGGCCGCGACGAAACGTCCTTCTCG	258
Dp	2595	G-----TGCATACAGGATGAACT--	GCAATTCGCGACGAGAAAGTCCAT-----	264
Oy	2582	ATGGAGAGCGCGGCATTCGCGAG	GTGACATGACATGAGGTTGTGGTTAGACGCT	264
Dp	2641	---GGAGCGCGGCATTCGCGAG	ATGACATGACATGAGGTTGTGGTTAGACGCT	269
Oy	2642	GATTTCGATCTGATCTGTCTCGT	ACGACAGTACGAGCGACGTTAGGAGCGCTCTTGT	270

Db	Accession	Source	Accession	Source
Db	2696	GATTC-----CAATCCGCGCCGATGAGATAGAGCG-----	2728	
Qy	2702	TGCAGATATATGGAATGTTGTCAACTGTGTAATGTACTATGTATGTAATGCGTAT	2761	
Db	2729	---AGGATATAGGAGATCTT---AAGCTGGATATGTAATTTGTAATGTGTGTGATAT	2782	
Qy	2762	TACAAATGTTGTTACTTATCTTGTAA	2788	
Db	2783	TACAAATGTTGTTACTTATCTTGTAA	2809	

RESULT 2

US-10-818-624-5

Sequence 5, Application US/10818624

Publication No. US20040204579A1

GENERAL INFORMATION:

APPLICANT: Block, Martina

Lotz, Horst

Luticke, Stephanie

Walter, Lemart

Fronberg, Claus

Kosmann, Jens

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES FROM WHEAT WHICH ARE INVOLVED IN STARCH SYNTHESIS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave

STREET: 1251 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: United States of America

ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.30 (EPO)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/818,624

FILING DATE: 05-Apr-2004

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/952,677

FILING DATE: 14-Sep-2001

APPLICATION NUMBER: 09/196,390

FILING DATE: 19-Nov-1998

APPLICATION NUMBER: DE 196 21 588.9

FILING DATE: 29-MAY-1996

APPLICATION NUMBER: DE 196 36 917.7

FILING DATE: 11-SEP-1996

APPLICATION NUMBER: PCT/EP97/02793

FILING DATE: 28-MAY-1997

ATTORNEY/AGENT INFORMATION:

NAME: Haley, Jr., James F.

REGISTRATION NUMBER: 27,794

REFERENCE/DOCKET NUMBER: AGRVO-9

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 596-9000

TELEFAX: (212) 596-9090

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 2825 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA to mRNA

HYPOTHEetical: NO

ANTI-SENSE: NO

ORIGINAL SOURCE:

ORGANISM: Triticum aestivum L.

STRAIN: cv. Florida

TISSUE TYPE: ca. 21 d Caryopses

Db	2055	GGCGACGGCATGCTTGGATGCTGAGCCAGAGACGTGACCTGCTGATGCTGGGACCCGGG	2114
Qy	2042	CGCCACGACCTGGAGAGAGATGCTGCGGCACTTCGACCGGGAGCACCCAGCAAGGTGCGC	2101
Db	2115	CGCCACGACCTGGAGAGAGATGCTGCGGCACTTCGACCGGGAGCACCCAGCAAGGTGCGC	2174
Qy	2102	GGGTGGGTGGGGGTTCTCCGTGGGCTGGGCGCACCGGATACGGCGGGGCCCGACCGGCTTC	2161
Db	2175	GGGTGGGTGGGGGTTCTCCGTGGGCTGGGCGCACCGGATACCGCGGGGGCGGACCGGCTTC	2234
Qy	2162	CTCATATGCTCCCGGTTGAGCGCGGTGGAGGCGGTTGAACGAGCTTAAAGCCATGAGCTTACGGC	2221
Db	2235	CTCATATGCTCCCGGTTGAGCGCGGTGGAGGCGGTTGAACGAGCTTAAAGCCATGAGCTTACGGC	2294
Qy	2222	ACCGTCCCGCTGCTGACGACCGCTCGGCGGGGAGTGAAGGAGCACCGGTGCGCGCTTTCGACCC	2281
Db	2295	ACCGTCCCGCTGCTGACGACCGCTCGGCGGGGAGTGAAGGAGCACCGGTGCGCGCTTTCGACCC	2354
Qy	2282	TTCAACCACTCCGCGCTCGGCTGGAGCTTCGACCGCGCGGAGCGCACCAAGCTGATCGAG	2341
Db	2355	TTCAACCACTCCGCGCTCGGCTGGAGCTTCGACCGCGCGGAGCGCACCAAGCTGATCGAG	2414
Qy	2342	GGCGTCCGGGACCTGCTCGGACCTACCGGGGACTCAAGGAGAGCTGAGGGGGCTCCGAC	2401
Db	2415	GGCGTCCGGGACCTGCTCGGACCTACCGGGGACTCAAGGAGAGCTGAGGGGGCTCCGAC	2474
Qy	2402	GAGCGCGGACATGCTCGACGAGCTTCAGCTGGAGAGATGCGCGCAAGCTCTACGAGAGAGCTC	2461
Db	2475	GAGCGCGGACATGCTCGACGAGCTTCAGCTGGAGAGATGCGCGCAAGCTCTACGAGAGAGCTC	2534
Qy	2462	CTCCTCAAGGCCAAGTACCAAGTGTGGAACGCTAGCTGCTAGCCGCTCCAGCCCGCATGC	2521
Db	2535	CTCCTCAAGGCCAAGTACCAAGTGTGGAACGCTAGCTGCTAGCCGCTCCAGCCCGCATGC	2594
Qy	2522	GTCGATGATGAGAGGGTGGAACTGCGCACTTCGCGCCGAGGAAAGTGCATCTTCTCG	2581
Db	2595	GTCGATGATGAGAGGGTGGAACTGCGCACTTCGCGCCGAGGAAAGTGCATCTTCTCG	2640
Qy	2582	ATGGAGAGCGCGGACATCCGCGAGGTGACGTGACATGAGAGGTGTGTGTTGAGACGCT	2641
Db	2641	ATGGAGAGCGCGGACATCCGCGAGGTGACGTGACATGAGAGGTGTGTGTTGAGACGCT	2695
Qy	2642	GATTCGATCTCGATCTGTGTCCGTAGCAGAGTAGAGCGGACGTAGGGGAAGCGCTCTTGT	2701
Db	2696	GATTCGATCTCGATCTGTGTCCGTAGCAGAGTAGAGCGGACGTAGGGGAAGCGCTCTTGT	2728
Qy	2702	TGCGAGTATATGGGAATGTGTGCACTTGATTTGTATTTGTATTTGTATTTGTATTTGTAT	2761
Db	2729	TGCGAGTATATGGGAATGTGTGCACTTGATTTGTATTTGTATTTGTATTTGTATTTGTAT	2782
Qy	2762	TACATGTTGTTACTTATTTCTTTGTTAA	2788
Db	2783	TACATGTTGTTACTTATTTCTTTGTTAA	2805

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: LENGTH: 2920
: TYPE: DNA
: ORGANISM: Hordeum vulgare
US-10-416-439C-1

Query Match      76.6%; Score 2175.8; DB 19; Length 2920;
Best Local Similarity 88.5%; Pred. No. 0;
Matches 2511; Conservative 0; Mismatches 227; Indels 99; Gaps 10.

QY 46 CCCGCGATCGTACCATCGCCCGCCCGATCCGGCCGCGCCGACATGTCGCGCGTGC 105
Db 71 CCGCCCATCGTACCGTCGCCCCCGCCCGATCCGGCCGCGCCGACATGTCGCGCGTGC 130
QY 106 GTCGCGCGCGTCTTCTCTCGGCTCGCTCGGCTTCCCGCGAG--ATACGAGGCG 162
Db 131 GTCCCGCGCGTCTTCTCTCGGCTCGCTCGGCTTCCCGCGAGATCATACGAGAG 190
QY 163 GCGAGAGGTGAGCGCGCGCACCCCAACGCGCGGAGCGCGAGAGTGCAGTGGCGCGT 222
Db 191 GCGAGAGGTGAGCGCGCTGCGCAACCCCGCTGGGAGCGCGAGCTGCATGGCGCGCT 250
QY 223 GCGCGCGCAGCGACGCGCTCGCGACGAGAGGTGTGCGCGCGCGCGCGCGAGAGGA 282
Db 251 GCGCGTCAAGCGACGCGCTCGCGACGAGAGCGGTGTGCGCGCGCGCGCGGAG-- 303
QY 283 CGCAGAGGTGACGACGACGCGCGGTGCGGAGGACGCCCGCGACGCGCGGCGGTGG 342
Db 304 -----TCAGCAGCGCGCGCGCGGTAGGAGCGCGCGCTGCGCGTATGGCG 352
QY 343 CGCCACCAAGTTCGCGGAGCGAGGAGATCCCGTCAAGCGCTGCATCGCAGCGCGG 402
Db 353 CGCCACCAAGTTCGCGGAGCGAGGAGATCCCGTCAAGCGCTGCATCGCAGCGCGG 403
QY 403 AGGTGCGCGCGCGCGACCGCGCGGACCGAGGACGAGCGCGCGCTGCACCGATATGA 462
Db 404 AGGTGTGGGCGCGTCCCGCGGACCGAGGACGAGCGCGCGCTGTGCGAGATMAAA 463
QY 463 CGGACGCGCGGTGAAGAGGTGAGAACATATCAACGGGCGCGCGCGCGGACCAAGAG 522
Db 464 CGGACGCTGATCAACGGTGAAGAACATTAACGGGCGCGGTGGCGGACTTAAGAGAG 523
QY 523 CGGCGTCCCGCGACCGCGCACGCGCGGCCCATCGTGCACCCAGAACAGATACAGTGA 582
Db 524 CGGCGTTCGCACACCGCGACGCGCGGCCCATCTGTCAATCCAAACAGATACCGGTGA 583
QY 583 CGGTGAAAACAAAGCTTAACGTGCGCTTGGCGCGCGACAGACATAGCCGAGTGTGCTCC 642
Db 584 CGGTGAAAACAAACATTAAGTGTGCGCTTGGCGCGCGACAGACATAGTGTGTGCGTCTCC 643
QY 643 GGATTTCCGAGCTTACATTTTCATCAGTGAACAAGCGCGGAGTCCGTTGCCAGCGGA 702
Db 644 GGGTTCGCGAGCTTACATTTTCATCAGTGAACAAGTGCGCCGTTCGTTGCCAGCCA 703
QY 703 GAAGCGCGC-----GCCGTGTCGCGTCAAA 729
Db 704 GAAGACGCGCGCGCGTGTCCGTTTCCCGGCGCAAGAGCGGTGCGTGTCCGCTCAA 763
QY 730 TTTGTGTGTCTCGGCTTCTGCTCCAGGCTGGAATTTGACAGCGATGTGAACCTGAAT 789
Db 764 TTTTGTGTCTCTCGGCTCTGTCTCCAGGCTGGAACATGTGACGATGTGAACCTTGACA 823
QY 790 GAAGAGAGGTGCGGTCAATCGTCAAGAGAGCTCCAAACCAAGAGGCTCTTTGGCGCGTGC 849
Db 824 GAAGAGAGATGCGGTATTTGTCAAGAGAGCTCCAAACCAAGAGGCTCTTTGGCGCGCTGC 883
QY 850 AGCCCGCGCTGTACAGAGAGCTTTTGGGACTTTCAGAAATACATTTGGCTTCGAGAGCC 909
Db 884 AGCCCGCGCTGTACAGAGAGCTTTTGGGATTTTCAGAAATACATTTGGCTTCGAGAGCC 943
QY 910 CGTGAAGGCAAGATATGATGCGGTGTGTCAGATGATGCGGCGCTCTTTGAACATCA 969
Db 944 CGTGAAGGCAAGATATGATGCGGTGTGTCAGATGATGCGGCGCTCTTTGAACATCA 1003

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QY 970 CCAGAACCATGATTCGCGACCTTTGGCAGGGGAGAACGTACATGAACGTGCTGTCGTGC 1029
DB 1004 CCAGAAATGATGATTCGCGACCTTTGGCAGGGGAGAACGTACATGAACGTGCTGTCGTGC 1063
QY 1030 TGCCTGATGTTCTCCCTGCTGCAAAACAGTGTCTTGGAGATGTTGCCCGTCTTGGCC 1089
DB 1064 TGCCTGATGTTCTCCCTGCTGCAAAACAGTGTCTTGGAGATGTTGGCGGTCTTGGCC 1123
QY 1090 CAAGGCTTTGGGAGAGAGAGCATGCTTATGTTGGTGGTACCAAGGTATGGGGACATA 1149
DB 1124 CAAGGCTTTGGGAGAGAGAGCATGCTTATGTTGGTGGTACCAAGGTATGGGGACATA 1183
QY 1150 TGAAGAACCTTACGATGTCGAGTCCGAAATACTACAAAGGCTGCTGAGCAGATATGGA 1209
DB 1184 TGAAGAACCTTACGATGTCGAGTCCGAAATACTACAAAGGCTGCTGAGCAGATATGGA 1243
QY 1210 AGTGAATATTTCCATGCTTATATGATGAGATTTTGTGTTCACTTGAACGCTCTCT 1269
DB 1244 AGTGAATATTTCCATGCTTATATGATGAGATTTTGTGTTCACTTGAACGCTCTCT 1303
QY 1270 CTTCGACACCGCCGAGAAACATTTATGGGGGAGAGACAGAAATTTATGAAGCGCAT 1329
DB 1304 CTTCGACACCGCCGAGAAACATTTATGGGGGAGAGACAGAAATTTATGAAGCGCAT 1363
QY 1330 GATTTTGTCTGCAAGGCGCTGTCGAGGTTCTTGGACGTTCCATGCGGCGGTCTCC 1389
DB 1364 GATTTTGTCTGCAAGGCGCTGTCGAGGTTCTTGGACGTTCCATGCGGCGGTCTCC 1423
QY 1390 TTATGAGGATGGAATCTGTGTCTTATTTGCAATGATTTGGACACGCGCATCTCTCTCT 1449
DB 1424 TTACGGGGATGGAATCTGTGTCTTATTTGCAATATTTGGACACGCGCATCTCTCTCT 1483
QY 1450 CTATCTGAAGCATTTACAGGGACCATGTTTGAATGACATCACTCGGTCATTATGAT 1509
DB 1484 CTATCTGAAGCATTTACAGGGACCATGTTTGAATGACATCACTCGGTCATTATGAT 1543
QY 1510 GATACATTAACATCGCGCACAGGGCGCTGCGCCAGTATGAAATTCCTGTTACCGAGAT 1569
DB 1544 GATACATTAACATCGCGCACAGGGCGCTGCGCCAGTATGAAATTCCTGTTACCGAGAT 1603
QY 1570 GCCTGAGCATTAACCTTGAACACTTCAACATGTAACGACCCCGTGGGTGTGAGACGCCAA 1629
DB 1604 GCCTGAGCATTAACCTTGAACACTTCAACATGTAACGACCCCGTGGGTGTGAGACGCCAA 1663
QY 1630 CTACTTCGCGCGGCTGGAAGATGCGGACCAAGGTTGCTGCTGAGAGCCCGGCTACCT 1689
DB 1664 CTACTTCGCGCGGCTGGAAGATGCGGACCAAGGTTGCTGCTGAGAGCCCGGCTACCT 1723
QY 1690 GTGGAGCTCAAGACGCTGAGAGGCGGCTGGGGCTTCAACGACATCATACGACAGACGA 1749
DB 1724 GTGGAGCTCAAGACGCTGAGAGGCGGCTGGGGCTTCAACGACATCATACGACAGACGA 1783
QY 1750 CTGGAAGACCCGCGCATCTGTAAACGCGATCGAACATGAGAGTGGAAACCCCGAGAGTGA 1809
DB 1784 CTGGAAGACCCGCGCATCTGTAAACGCGATCGAACATGAGAGTGGAAACCCCGAGAGTGA 1843
QY 1810 CGTCCACCTCAAGTGGAGCGGCTCAACCAACTTCCCTGGGGGAGCGTGAATCCGGGCAA 1869
DB 1844 CGTCCACCTCAAGTGGAGCGGCTCAACCAACTTCCCTGGGGGAGCGTGAATCCGGGCAA 1903
QY 1870 GCGGAGTGCAGAGAGGCGCTGACAGCGGAGCTGGGGCTGACAGTCCGCGCGCAGAGTGC 1929
DB 1904 GCGGAGTGCAGAGAGGCGCTGACAGCGGAGCTGGGGCTGACAGTCCGCGCGCAGAGTGC 1963
QY 1930 GCTGCTCGGCTTCAATCGGCGCGCTGAGAGGCGGAGAAAGGCGTGGAGATCATCGCGAGCGC 1989
DB 1964 GCTGCTCGGCTTCAATCGGCGCGCTGAGAGGCGGAGAAAGGCGTGGAGATCATCGCGAGCGC 2023
QY 1990 CATGCCCTGAGATCGGAGCGAGAGAGTGAAGCTGATCATGCTGGGACACCGGCGCGCAGAGA 2049
DB 2024 GATGCCCTGAGATCGGAGCGAGAGAGTGAAGCTGATCATGCTGGGACACCGGCGCGCAGAGA 2083
QY 2050 CCTGAGAGCATGCTGCGGCACTTTCAGCGGAGACCAACGACAAAGTGTCCGGGTGGGT 2109

DB 2084 CCTGAGAGCATGCTGACAGCACTTTCAGCGGAGAGACCAACGAGTGTCCGGGTGGGT 2143
QY 2110 GGGGTTCTCCGTGGGCGCTGAGGCAACCGGATCAACGCGGGGCGCGACGCGCTCTCATGCG 2169
DB 2144 GGGGTTCTCCGTGGGCGCTGAGGCAACCGGATCAACGCGGGGCGCGACGCGCTCTCATGCG 2203
QY 2170 CTCCGCTTTCAGAGCGCTGAGGCTTGAACCAACCTTTTACGCAATGAGCTTACCGACCGTCC 2229
DB 2204 CTCCGCTTTCAGAGCGCTGAGGCTTGAACCAACCTTTTACGCAATGAGCTTACCGACCGTCC 2263
QY 2230 GCTGTGACAGCGCTGAGGCGGCTGAGGCAACCGTGTCCGCTTACACCCCTTACACCA 2289
DB 2264 GCTGTGACAGCGCTGAGGCGGCTTGAAGGATACCGTGTCCGCTTACACCCCTTACACCA 2323
QY 2290 CTCCGCGCTCGGGTGAAGCTTCAACCGGCGGAGGCGCAACGCTGATGAGGCGCTCG 2349
DB 2324 CTCCGCGCTCGGGTGAAGCTTCAACCGGCGGAGGCGCAACGCTGATGAGGCGCTCG 2383
QY 2350 GCACTGCTCCGCACTTACCGGGACTACAGAGAGCTGAGAGGCGCTTCAAGAGCGCG 2409
DB 2384 GCACTGCTCCGCACTTACCGGGACTACAGAGAGCTGAGAGGCGCTTCAAGAGCGCG 2443
QY 2410 CATGTGCAAGACTTACGCTGAGAGCATGCGGCAAGCTTACAGAGAGCTTCTCTCA 2469
DB 2444 CATGTGCAAGACTTACGCTGAGAGCATGCGGCAAGCTTACAGAGAGCTTCTCTCA 2503
QY 2470 GGCAGAGTCAAGAGTGAACGCTACGCTGAGGCGCTTCAAGAGAGCTTCTCTCA 2529
DB 2504 GGCAGAGTCAAGAGTGAACGCTACGCTGAGGCGCTTCAAGAGAGCTTCTCTCA 2555
QY 2530 ATGAGAGGAGTGAACCTGCGCATT-----GCGCCGAGAGAACGTGCA 2572
DB 2556 ATGAGAGGAGTGAACCTGCGCATTGGGCACTTGGCAATTTGGGACGAGAGAGCTGCG 2615
QY 2573 TCTTCTGATGAGAGCGCGCATCGCGAGGTGACAGTGAACAGAGTGTGTGT 2632
DB 2616 TCTTCTGATGAGAGCGCGCATCGCGAGGTGACAGTGAACAGAGTGTGTGT 2675
QY 2633 TGAAGCGTGAATTCGATCTGATCTGCTCGGTGAGCAAGTGAAGCGGACGAGGAGAGC 2692
DB 2676 TGAAGCGTGAATTCGATCTGATCTGCTCGGTGAGCAAGTGAAGCGGACGAGGAGAGC 2735
QY 2693 GCTCTGCTGAGGATATGAGAGTGTGCACTTGTGATGATGATGATGATGATGATGATGAT 2752
DB 2736 TTTTTCGAGGAGGATATGAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 2792
QY 2753 ATGCTTATTAACA---ATGTTTACTTATTTCTT---GTTAAGTGGAGCAAGGCG 2804
DB 2793 GTGCAATTAATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2852
QY 2805 GAAAGCTAGCTCAATG 2821
DB 2853 GAAAGCTAGCTCAATG 2869

RESULT 4
US-10-416-439C-4
; Sequence 4, Application US/10416439C
; Publication No. US2004019942A1
; GENERAL INFORMATION:
; APPLICANT: Commonwealth Scientific and Industrial Research Organisation
; APPLICANT: Morell, Matthew Kennedy
; APPLICANT: Batey, Ian Leslie
; APPLICANT: Topping, David
; TITLE OF INVENTION: BARLEY WITH REDUCED SSII ACTIVITY AND STARCH CONTAINING PRODUCTS
; FILE REFERENCE: 0070/70440
; CURRENT APPLICATION NUMBER: US/10/416,439C
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4

Db	2077	GCAGCTGATGATGCTGGGCGAGGGGCGCCACGACCTGGAGACATGCTGCACACCTTGGA	2136
Qy	2077	GGGGAGACACACACGACAAGAGTGCAGGAGTGGGATTTCTCCGTGCGCTTGGCGACCG	2136
Db	2137	GGGGAGACACACACGACAAGAGTGCAGGAGTGGGATTTCTCCGTGCGCTTGGCGACCG	2196
Qy	2137	GATCACGGCGGGCGCGGACGGGCTCTCATGCTCTCCGGATTGAGCCGTGCGGGTTGAA	2196
Db	2197	GATCACGGCGGGCGCGGACGGGCTCTCATGCTCTCCGGATTGAGCCGTGCGGGCTGAA	2256
Qy	2197	CCAGTTTAAACCCAAATGGGCTAAGGCAACGTCGCCGCTGCGACGGCGTCGGGGGTGAG	2256
Db	2257	CCAGTTTAAACCCAAATGGGCTAAGGCAACGTCGCCGCTGCGACGGCGTCGGGGGTGAG	2316
Qy	2257	GGACACCGTGCAGCGCCGTTGCAACCCCTTCAACCACTCCGAGCTCGGGTGGACCTTTCACCG	2316
Db	2317	GGATACCGTGCAGCGCCGTTGCAACCCCTTCAACCACTCCGAGCTCGGGTGGACCTTTCACCG	2376
Qy	2317	CGCCGAGGCGGACAAAGCTGATCGAGGCGCTCGGGGCACTGCTTCGCACTTACCGGAACTA	2376
Db	2377	CGCCGAGGCGGACAAAGCTGATCGAGGCGCTCGGGGCACTGCTTCGCACTTACCGGAACTA	2436
Qy	2377	CAAGGAGGCTGGAAGGGGCTTCCAGGACCGCGGCAATGTCGACGAGACTTCAAGTGGAAACA	2436
Db	2437	CAAGGAGGCTGGAAGGGGCTTCCAGGACCGCGGCAATGTCGACGAGACTTCAAGTGGAAACA	2496
Qy	2437	TGCCGCCAAGGCTCTACGAGAGAGTCTCTCTCAAGGACCAAGTACCAAGTGAACCTAGC	2496
Db	2497	TGCCGCCAAGGCTCTACGAGAGAGTCTCTCTCTCAAGGACCAAGTACCAAGTGAACCTAGC	2552
Qy	2497	TGCTAGCCGCTCCAGGCCCCCGCATGCGTGCATGCAATGAGAGGGTGAACCTGCGCAAT	2552
Db	2553	TGCTAGCCGCTCCAGGCCCCCGCATGCGTGCATGCAATGAGAGGGTGAACCTGCGCAAT	2608
Qy	2553	-----GGCCCGCAGGAAGTGCATCTCTTCTGCATGGAGGCGCGGCAATCC	2599
Db	2609	ACTTGCAATTTGGGCGGACGCGAGGAACGCGCTCTTCTTATGAGAACGCGCGGCAATCC	2668
Qy	2609	GGAGGATCAGTGAATGAGAGGATGATGATGATGAGACGCGATCTCCGATCTGCATGCTG	2659
Db	2669	GGAGGATCAGTGAATGAGAGGATGATGATGATGAGACGCGATCTCCGATCTGCATGCTG	2728
Qy	2669	GTCGCTACAGAGTGAAGCGGACGACGTAGGGAAAGCGCTCTTGTGACAGTATATGGGAAATG	2719
Db	2729	TTGCAAGTATATGGGAATGTTTTTTTTCCTTTTTTTTTTTCGAGGAGGATATATGGGAAATG	2788
Qy	2729	TTGTCACCTTGGATTTGATTTGCTATGTTGTATGACGTTATTAACA---ATGTTGTTAC	2775
Db	2789	TT---AACTGGATTTGATTTGATTTGCTATGCTGTGCACTTATTAATCATCGATGTTGTTGC	2845
Qy	2776	TTATTTCTT-----GTTAAGTCGGAGGCAAAAGCGCGAAAGCTACTACAAATG	2821
Db	2846	TTATTTCTTGGATTTGATTTGCTATGTTGTATGACGTTATTAACA---ATGTTGTTAC	2895

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, RESULT 5
, US-10-416-439C-2
, Sequence 2, Application US/10416439C
, Publication No. US2004019942A1
, GENERAL INFORMATION:
, APPLICANT: Commonwealth Scientific and Industrial Research Organisation
, APPLICANT: Morell, Matthew Kennedy
, APPLICANT: Batey, Ian Leslie
, APPLICANT: Topping, David
, TITLE OF INVENTION: BARLEY WITH REDUCED SSII ACTIVITY AND STARCH CONTAINING PRODUCTS
, TITLE OF INVENTION: REDUCED AMYLOPECTIN CONTENT
, FILE REFERENCE: 0070/70440
, CURRENT APPLICATION NUMBER: US/10/416,439C
, CURRENT FILING DATE: 2003-12-05
, NUMBER OF SEQ ID NOS: 14
, SOFTWARE: Patentin version 3.1
, SEQ ID NO 2

```

[illegible]

QY	9937	TGTTGACAGATGATGAGGGGCTCTTGAACATACACAGAAACATGATTCGGACCTTTGGC	996
Db	997	TGTTGACAGATGATGAGGGTCTTGAACATACACAGAAATCAATGATTCGGACCTTTGGC	1056
QY	997	AAGGAGAGAACGTCAATGAACGTGTCGTCTGCTGTGATTTCTCCCTGATGCAAAAC	1056
Db	1057	AAGGAGAGAACGTCAATGAACGTGTCGTGTCGTGATTTCTCCCTGATGCAAAAC	1116
QY	1057	AGGTGTCCTTGAGATATATGCGGGTGTCTTGGCCAAAGGCTTTGGCTTAAGAGAGACATCG	1116
Db	1117	AGGTGTCCTTGAGATATATGCGGGTGTCTTGGCCAAAGGCTTTGGCTTAAGAGAGACATCG	1176
QY	1117	TGTTATGTTGTGTGTATACCAAGGTATGCGGACATATAGAGAAAGCTTACATGTGTGAGTCCG	1176
Db	1177	TGTTATGTTGTGTGTATACCAAGGTATGCGGACATATAGAGAAAGCTTACATGTGTGAGTCCG	1236
QY	1177	AAAATACTACAAAGGCTGTGACAGAGATATGGAAGTGAATTTATTTCCATGCTTAATATGCA	1236
Db	1237	AAAATACTACAAAGGCTGTGACAGAGATATGGAAGTGAATTTATTTCCATGCTTAATATGCA	1296
QY	1237	TGAGTGAATTTTGTTCATTTGACGCTCTCTCTCCGACACCGCCACAGAAAGACATTTA	1296
Db	1297	TGAGTGAATTTTGTTCATTTGACGCTCTCTCTCCGACACCGCTACAGAAAGACATTTA	1356
QY	1297	TGGGGGGACAGACAGAAATTAATGAAGGACATGATTTTGTTCGCAAGGCGCGTGTGCA	1356
Db	1357	TGGGGGGACAGACAGAAATTAATGAAGGACATGATTTTGTTCGCAAGGCGCGTGTGCA	1416
QY	1357	GGTTCCTTTGGACGCTTCCATGCGGGGGGTGTCCTTATGCGGAGTGAATACTGTGTTAT	1416
Db	1417	GGTTCCTTTGGACGCTTCCATGCGGGGGGTGTCCTTATGCGGAGTGAATACTGTGTTAT	1476
QY	1417	TGCAATATGATTTGGCACACGGCACCTCTGCTGTCTATCTGAAGCATTTACAGGAGACA	1476
Db	1477	TGCAATATGATTTGGCACACGGCACCTCTGCTGTCTATCTGAAGCATTTACAGGAGACA	1536
QY	1477	TGTTTGAATGACATCACTCGGTCATTAATGATATACATAATCGCGCACACAGGCGCG	1536
Db	1537	TGTTTGAATGACATCACTCGGTCATTAATGATATACATAATCGCGCACACAGGCGCG	1596
QY	1537	TGGCCACAGATGATGAATTCGGTTTACACCGAGTTGTGCTAGACATACCTGGAACACTTCAG	1596
Db	1597	TGGCCACAGATGATGAATTCGGTTTACACCGAGTTGTGCTAGACATACCTGGAACACTTCAG	1656
QY	1597	ACTGTACGACCCCGTGGGTGTGTAGACACGCGCAACTTTCGCGCGCGGCTGAAGATGGC	1656
Db	1657	ACTGTACGACCCCGTGGGTGTGTAGACACGCGCAACTTTCGCGCGCGGCTGAAGATGGC	1716
QY	1657	GACACAGGTTGTCTGTGTAGGCCCCGGGGTACTGTGGAGCTCAAGACGTTGAGAGGCGG	1716
Db	1717	GACACAGGTTGTCTGTGTAGGCCCCGGGGTACTGTGGAGCTCAAGACGTTGAGAGGCGG	1776
QY	1717	CTGGGGGGCTTACGACATCATACGCGCAAAAGCATGGAAGACCCCGGCACTGTGAACGG	1776
Db	1777	CTGGGGGGCTTACGACATCATACGCGCAAAAGCATGGAAGACCCCGGCACTGTGAACGG	1836
QY	1777	CATCGACAAATGAGATGGAACCCCGGAGTGGACGTCACCTCAAGTGGACCGGCTACAC	1836
Db	1837	CATCGACAAATGAGATGGAACCCCGGAGTGGACGTCACCTCAAGTGGACCGGCTACAC	1896
QY	1837	CAACTTCTTCCTGGAGGACGTTGAACTCCCGGCAAGCGGACATGCAAGAGGCGCTTCACAG	1896
Db	1897	CAACTTCTTCCTGGAGGACGTTGAACTCCCGGCAAGCGGACATGCAAGAGGCGCTTCACAG	1956
QY	1897	CGAGTGTGGGCTGACGATCCGCGCGGACGTCGTCGCTGCTTCACTCGGCGCGCTGGA	1956
Db	1957	CGAGTGTGGGCTGACGATCCGCGCGGACGTCGTCGCTGCTTCACTCGGCGCGCTGGA	2016
QY	1957	CGGGCAGAAAGGCGTGTGAGATCATCGCGGACGCGCACTGCTGATCTGTGACCCAGAGCGT	2016
Db	2017	CGGGCAGAAAGGCGTGTGAGATCATCGCGGACGCGCACTGCTGATCTGTGACCCAGAGCGT	2076
QY	2017	GCAGCTGTGATGCTGGGACCGGCGGACGACGACTGGAAGACATGCTGTGGGACCTTCGA	2076

Db 2077 GCAAGTGTGATGCTGGGCAACGGGAGCGCCACAGACTGGAGAGATGCTGCAGCACTTTCGA 2136
 Oy 2077 GCGGAGGCAACACGACAGAGGTGCGCGGGTGGGTGGGTTCCTCGTGCCTGGCGCACCG 2136
 Db 2137 GCGGAGGCAACACGACAGAGGTGCGCGGGTGGGTGGGTTCCTCGTGCCTGGCGCACCG 2196
 Oy 2137 GATCACGCGGGGCGCGGACGCGCTCTCATGCTCTCCCGGTTTCCAGCGGTGGGTTGA 2196
 Db 2197 GATCACGCGGGGCGCGGACGCGCTCTCATGCTCTCCCGGTTTCCAGCGGTGGGTTGA 2256
 Oy 2197 CCAGCTTTACGCATGAGGCTTACGCGACCGTCCCGTGTGACGCGCGTGGGGGTGAG 2256
 Db 2257 CCAGCTTTACGCATGAGGCTTACGCGACCGTCCCGTGTGACGCGCGTGGGGGTGAG 2316
 Oy 2257 GGAACACCGAGCGCGCTTTCGACACCTTTCACACACTCCGCGCTCGGGTGAAGTTGACCG 2316
 Db 2317 GGAATACCGTGGCGCGCTTTCGACACCTTTCACACACTCCGCGCTCGGGTGAAGTTGACCG 2376
 Oy 2317 GCGCGAGGCGCACAGACTGATGAGCGCTCGGGCACTGCTCGCACCTACCGGACTA 2376
 Db 2377 GCGCGAGGCGCACAGACTGATGAGCGCTCGGGCACTGCTCGCACCTACCGGACTA 2436
 Oy 2377 CAAGGAGACTGAGGGGCGCTCCAGAGAGCGCGGATGTCGAGAGACTTCACTGGGAGCA 2436
 Db 2437 CAAGGAGACTGAGGGGCGCTCCAGAGAGCGCGGATGTCGAGAGACTTCACTGGGAGCA 2496
 Oy 2437 TSCCGGCAAGCTCTACGAGGACGTCTCTCAAGGCGCAAGTACAGTGTGAACGCTAGC 2496
 Db 2497 TSCCGGCAAGCTCTACGAGGACGTCTCTCTCAAGGCGCAAGTACAGTGTGAACGCTAGC 2552
 Oy 2497 TGTACGCGCTCCAGCGCCGCGCATGCGTGCATGACATGAGAGGTGAACTGCGCATTCGCG 2556
 Db 2553 TGTACGCGCTCCAGCGCCGCGCATGCG---TGACATGAGAGATGAAATGCGCATTCGCG 2608
 Oy 2553 CC-----GACAGAACTGTCATCTTCTTCGATGGGAGCGCGCATTC 2599
 Db 2609 ACTTGACATTTGCGCGCATGACAGAACTGCGCGCTCTTGTGATGGGAACTCGCGCATTC 2668
 Oy 2609 GCGAGGTGAG---TGACATGAGAGGTGTGTGTGTTGAGACGCTGATTCGATCTGCA 2655
 Db 2669 GCGAGGTGAGACGCTGATTCGATCTGTGTCTGTCGAGAGTACGATGAACTGCTTCG 2728
 Oy 2656 TCTGTCCGTAGACAGATGAGCGGACGTAGGGAGCGCTCTTGTGACAGTATATGAG 2715
 Db 2729 TTGCAGGTATATGGGAATGTTTTTTTTTCTTTTCTTTTTTTTGGAGAGGATATGAG 2788
 Oy 2716 AATGTTGCACTGTGATTTGATGTTGCTATGTTGATGCGTTATACA---ATGTTG 2771
 Db 2789 AATGTT---ACCTGTGATTTGATGTTGATGCTGTGTGCATTTATACATCGGTTGTTG 2845
 Oy 2772 TTACTTATCTTCT---GTTAAGTCGAGGCAAGGGGGAAGGCAAGTACGATCATG 2821
 Db 2846 TTGCTTATCTTGTGCTAGCTTAAGTCGAGGCGCAAGAGCGCAAGCTTAAGCTCATG 2899

RESULT 6
 US-10/416-439C-3
 ; Sequence 3, Application US/10416439C
 ; Publication No. US20040199942A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Commonwealth Scientific and Industrial Research Organisation
 ; APPLICANT: Morell, Matthew Kennedy
 ; APPLICANT: Batey, Ian Leslie
 ; APPLICANT: Topping, David
 ; TITLE OF INVENTION: BAILEY WITH REDUCED SSII ACTIVITY AND STARCH CONTAINING PRODUCTS
 ; FILE REFERENCE: 0070/70440
 ; CURRENT APPLICATION NUMBER: US/10/416,439C
 ; CURRENT FILING DATE: 2003-12-05
 ; NUMBER OF SEQ ID NOS: 14
 ; SOFTWARE: Patentin version 3.1
 ; SEQ ID NO 3

Db 1035 GATCTGAACGAACCGGACCGCGAGAGATGCGATGACGATGACTGAGGCTGATTCA 1094
Qy 944 GATGATGCGGGGCTCTTTGAACATACACGAACCATGATTCGGACCTTTGGCAGGGAG 1003
Db 1095 GATGCGTGAAGATTC--TGAGATCGACAGATGACGATTCGGGCTTTGGCTGGGAG 1151
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Db 1212 CTGAGATGTTTGGCGGTGCTTTTACCAAGCTTTGGCGAAGAGACATGTTATG 1271
Qy 1124 GTTGTGTCACCAAGTATGAGGACCTATGAGAACCTACATGTCGAGTCCGAATAAC 1183
Db 1272 GTTGTGTCACCAAGTATGAGGATTAACGGAAGCCAGAGTATGGAATCAGGAATAAC 1331
Qy 1184 TACAAGGCTGCTGACAGGATATGGAAGTAATATTTCATGCTTATATGATGAGATT 1243
Db 1332 TACAAGGCTGCTGACAGGATATGGAAGTAATATTTCATGCTTATATGATGAGATT 1391
Qy 1244 GATTTTGTTCATTTGACGCTCTCTCTCCGACACCGCAGAAAGACATTTATGAGGAGC 1303
Db 1392 GATTTTGTTCATTTGACGCTCTCTCTCCGACACCGCAGAAAGACATCTATGAGGAG 1451
Qy 1304 AGCAGACAGAAATATGAGAGCATGATTTTGTCTGCAAGCCGCTGTCGAGTTCT 1363
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Qy 1364 TGGGACGTTCCATGCGGCGGTGTCCCTATGCGGAGTGAATACTGCTGTTATTTGCAAT 1423
Db 1512 TGGGACGTTCCATGCGGCGGTGTCCCTATGCGGAGTGAATACTGCTGTTATTTGCAAC 1571
Qy 1424 GATTGGCACAGGCACTCTGCTGTCTATCTGAAGCATATTCAGAGGACCATGTTG 1483
Db 1572 GATTGGCACAGGCACTCTGCTGTCTATCTGAAGCATATTCAGAGGACCATGTTG 1631
Qy 1484 ATGACGTCACCTCGGTCATTTATGCTATACATTAACATGCGGACACGAGCGCGTGGCCA 1543
Db 1632 ATGACGTCACCTCGGTCATTTATGCTATACATTAACATGCTTACGAGGCGCGTGGCCA 1691
Qy 1544 GTAGATGAATCCGCTTACCGAGTGTGCTGACCTACCTGGAACCTTACAGATGCTAC 1603
Db 1692 GTAGATGAATCCGCTTACCTGATGAAATTCGCGAGCATACCTGATCATTCAAGCTGAC 1751
Qy 1604 GACCCCGTGGTGTGACAGCAGCCAACTATTCGCGCGCGCTGAAAGATGCGGACAG 1663
Db 1752 GACCCCGTGGGCGGAGACAGCCAACTATTCGCGCGCGCTGAAAGATGCGGACAG 1811
Qy 1664 GTTGTCTGTGAGCGCGGTAATCTGTGGAAGCTCAAGACGTCGAGGCGGCTGAGGG 1723
Db 1812 GTTGTCTGTGAGCGCGGTAATCTGTGGAAGCTCAAGACGTCGAGGCGGCTGAGGG 1871
Qy 1724 CTTCACGACATCATACCGGACAGACCTGGAAGACCCCGGCACTGTAAGGCTACAC 1783
Db 1872 CTTCACGACATCATACCGGACAGACCTGGAAGACCCGATCTGTAAGGCTACAC 1931
Qy 1784 AACATGAGTGAACCCCGAGGTGACGTCACCTCAAGTCGAGCGGCTACACCAATTC 1843
Db 1932 TACCGGAGTGAACCCCGAGGTGACGTCACCTGAGCTGAGCGGCTACCGCACTAC 1991
Qy 1844 TCCCTGGGAGCGTCGACTCCGGCAAGCGGACGTCAGAGAGGCCCTGACGCGAGCTG 1903
Db 1992 ACCGTGGCTGCTGAGTCTCAGCAAGCCGCGGTGCAAGCGGCGCTCAGCGAGCTG 2051
Qy 1904 GGCCTGACAGTCCCGCGGACAGTGCCTGCTGCTGCTTCAATCGCGCTGAGACGGGAG 1963
Db 2052 GGGCTGAGGTGCGGACAGAGTGCCTGATCGGTTCAATCGGCGGCTGACGGGAG 2111
Qy 1964 AAGGCGGTGAGATCATGCGGAGCGCAATGCCCTGATCTGAGACGACGTCGAGCTG 2023

Db 2112 AAAGTGTGACATCATCGGACAGCAGATGCCGTGATTCGCGGAGACAGCTGCAGCTG 2171
Qy 2024 GTCATGTCGGGACCGGCGGCCACGACTTGAAGACATGCTCCGCACTTGAGGAGAG 2083
Db 2172 GTGCTGTCGGCTCGGCGCGCCGACCTGAGGTGATGCTGACAGCGGTTCGAGGCGAG 2231
Qy 2084 CACCAAGCAAGAGTGCAGGAGTGGAGGATTTCTCCGTGCGGCTGAGGACCGATACAG 2143
Db 2232 CACCAAGCAAGAGTGCAGGAGTGGAGGATTTCTCCGTGCGGCTGAGGACCGATACAG 2291
Qy 2144 GCGGCGCGTGAAGCGCTCTCATGCTCTCCGCTTGAAGCGGTGAGGATTAACAGCTT 2203
Db 2292 GCGGCGCGTGAAGCGCTCTCATGCTCTCCGCTTGAAGCGGTGAGGATTAACAGCTT 2351
Qy 2204 TACGTCATGCGCTACAGGACCGTCCCGTCTGTCACCGCGCTGCGGAGTGAAGACAC 2263
Db 2352 TACGTCATGCGCTACAGGACCGTCCCGTCTGTCACCGCGCTGCGGAGTGAAGACAC 2411
Qy 2264 GTGCGCGCTTGAAGCGCTCTCATGCTCTCCGCTTGAAGCGGTGAGGATTAACAGCTT 2323
Db 2412 ATGTGCGGCTTGAAGCGCTCTCATGCTCTCCGCTTGAAGCGGTGAGGATTAACAGCTT 2471
Qy 2324 GCGCAAGCTGATGAGAGCGCTCGGACATGCTCCGACCTACCGGACCTACAGAGAG 2383
Db 2472 CGGCAAGCTCATGAGAGCGCTCGGACATGCTCCGACCTACCGGACCTACAGAGAG 2531
Qy 2384 AGCTGAGGCGCTTCAGAGCGGAGCATGTCGAGACCTTACGTCGAGGAGATCCGCC 2443
Db 2532 AGCTGAGGCGCTTCAGAGCGGAGCATGTCGAGACCTTACGTCGAGGAGATCCGCC 2591
Qy 2444 AAGCTTACGAGGAGCGTCTCTCAAGGCGCAAGTACAGTGGTGA 2489
Db 2592 GAGCTTACGAGAGGCTCTTGTCAAGGCGCAAGTACAGTGGTGA 2637

RESULT 9
US-10-260-238-1034
; Sequence 1034, Application US/10260238
; Publication No. US20040016025A1
; GENERAL INFORMATION:
; APPLICANT: Budworth, Paul R.
; APPLICANT: Moughamer, Todd G.
; APPLICANT: Briggs, Steven P.
; APPLICANT: Cooper, Bret
; APPLICANT: Glazebrook, Jane
; APPLICANT: Goff, Stephen A.
; APPLICANT: Katagiri, Fumiyaki
; APPLICANT: Kreps, Joel
; APPLICANT: Provart, Nicholas
; APPLICANT: Rieke, Darrell
; APPLICANT: Zhu, Tong
; TITLE OF INVENTION: PROMOTERS FOR REGULATION OF PLANT EXPRESSION
; FILE REFERENCE: 60111-NP
; CURRENT APPLICATION NUMBER: US/10/260,238
; CURRENT FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 60/325,448
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US 60/325,277
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US 60/370,620
; PRIOR FILING DATE: 2002-04-04
; NUMBER OF SEQ ID NOS: 6077
; SEQ ID NO 1034
; LENGTH: 2412
; TYPE: DNA
; ORGANISM: *Oryza sativa*
US-10-260-238-1034

Query Match 43.6%; Score 1238.6; DB 17; Length 2412;
Best Local Similarity 71.7%; Pred. No. 0;
Matches 1733; Conservative 0; Mismatches 624; Indels 60; Gaps 6;
Qy 105 GGTCCGCGGCTCTTCTGCTGCGCTGCGCTCCGCTCCCGGAGATACAGCAGGGGG 164

Db	23	CATCCACCACGTTCTCGTCCGCGCTCGCTCTTTGGCGTCA	CGGGAGAGGCTCCAGAGAGG	82
OY	165	CGAGGGTAGC-----GGCGCGCA	CCCCAGCGCGGGCGCGAGC	206
Db	83	GGAGGGTGTGTGGGCGTGGCCCGCCCGCCGCGCTTGTCTTA	GACGGCCGCGCCGGMAAGC	142
OY	207	TGCATGGCGCCGCTGGGCGCCCGCAGCGCACCGCTCGCGA	CGAGGTGTGGCGCGCG	266
Db	143	TAGCCCTTACGGGCGCGCTTCGCGCCCGGCTCGGCGCT	CGCGGATTCGGGCGTGG	202
OY	267	CCGCGGGGAAGAAAGAACGCGAGGGTGCAGACGACGCGCT	CCGCGAGCGGCCCGCG	326
Db	203	TGCGCGCGCGAGATATATGGGAGAAACGAGCGCGGTGAG	CGGCGGTGAGACGACG	262
OY	327	CACGCGCGGTGGCGCGCCACCAAGTTCGCGAGCGGAGGAT	TCGCTCAACGCTCG	386
Db	263	ACGAGGAGGAGAGATGTTCTTTCGGGCGCTTGACACGCG	CCCCGCTCGCGTCCGCGCGCT	322
OY	387	ATCGGACGCGCGGAGAGTGGCGCGCGGACCGCGGCA	CGAGCGAGAGCGCGCC	446
Db	323	TCGGCAAGTCTTGAAGCGGAGGGGCAACGTCCGCGCT	CGGCGGTACGGCTCGGCG	382
OY	447	GTCCACCGAGTATGAACGGCACGCGGTGAAACGTGAGAA	CAAACTCTACCGGCGCGCG	506
Db	383	GTGATGCGGCGAGAGTGGCGGGGGGCGCGCGCGCGCG	CGGCGCGCACAGGACGCG	442
OY	507	GGCGACCAAAAGACAGCGGGCTGCCGCGCACCGCGCAC	CGCGCCCGCATCGTCGACCGA	566
Db	443	CCTCAAGTAAAGACCGAGCGCTCTCAGCGGCGCGGAC	AGACACACCTGCTCACGGA	502
OY	567	ACAGAGTACCAAGTGAACGGTAAAAAAGTAAAGTGCCT	CGCGCGCGGACGAGATAG	626
Db	503	ACGAGTACGATCGTATCCGCGCGCGCACAGCTGCG	CGCGCACGCGCGGTGACATAA	562
OY	627	CCGAGGTGTGGCTCCGGATTCGCGAGTACATTTCCAT	CATAGTGAAGAGC---GGCG	683
Db	563	CGAAGCTCCAGCGCGGAGCTCCCGGTGATCTTTCAT	TCGTGAGACAAAGCGGACGCG	622
OY	684	AGTCGTTGTCCACGCGGAGAGCGCGCGCTCGTCCG	CTCAAAATTCGTGCTTCGG	743
Db	623	AGTTGTATATCCACAGACCGGAGCGCGCGCGCGCAC	CGCGCGGTCAATCCGAGT	682
OY	744	CTTCTGCTCCAGCGCTGACATTTGACAGCGATGTTGA	ACTTGAACTGAAGAGGTGCG	803
Db	683	CGTCGCTCTCTCTCCCAAGCTGACA--ATTGGAA	TTTGGAGGATTAAGCGCAA	739
OY	804	TCATGTGGAAGAGCTCCAAACCCAAAGGCTCTTGC	CGCGCTGACAGCCCCGCTGAC	863
Db	740	AAGTTGTGAGAGTGCTCCGAAGCCAAAGGCGAC	TACATCTTCCCTATTCCTGCGGTAG	799
OY	864	AAGAAGACCTTTGGGACTTCAAGAAATACATTTGG	CTTGAGAGAGCCGTGAGGCGAAG-	922
Db	800	AAGAGGAGACGTGGGATTTCAAGAAATTTTGTAT	CTGAAGAACGAGCCGCGGAGG	859
OY	923	-----GATGATGAGTGGGCTGTGTCAGATAGCGGG	CTCTTGAACATCAC	971
Db	860	ATGGCGATGACGATATGATCTGGGCTGATTCAGAT	GCCTACGATTC---TGAGATCGAC	916
OY	972	AGAACCATGATTTCCGAGCTTTGGCAGGGGAGAAC	GTATGAACGTGTGCTGCTGCTG	1031
Db	917	AGGATGAAGATTCGGGCGCTTTGGCTGGGGAGAA	GTATACATAAACGTGATCGTGGGCTG	976
OY	1032	CTGAATGTTCTCCCTGGTGCAAAACAGGAGCTTG	GAGATGTTGCGGATCTTTGACCA	1091
Db	977	CTGAAT-----GTGGCTGGAAGATGTTCAGAG	TGTCTTATCCCA	1015
OY	1092	AGGCTTTGGCGAAGAGAGACATCGTGTATAGTTGT	GTATCAAGGATATGGGACATAG	1151
Db	1016	AAGCTTTGGCGAGAGGACATCGTGTATATGTGT	GTATACAAAGTATCGTATACG	1075
OY	1152	AGGAAGCTTACGATGTCCGAGTCCGAAATATCTA	CAGGCTGCTGACAGATATGGAAG	1211

Db	1076	CGAAGCCGACGATGTGAGATTCAGAAATACATCAAGGCTGCTGACAGAGATCTGGAG	1135
Qy	1212	TGAATATATTCATGCTTTATATATGATGAGTGGATTTTGTGTTCATTGACGCTCTCTCT	1271
Db	1136	TGAATATATTCATGATCATTTATCATGATGAGTGTGTTTGTGTTCATTGACGCTCTCTCT	1195
Qy	1272	TCCGACACCGGCAGGAAGACATTTATATGGGGGACGACACAGGAAATATATGAGCGCATGA	1331
Db	1196	TCCGTACACCGTACAGATATCTATATGGGGGAAACAACAGGAATATATGAGCGCATGA	1255
Qy	1332	TTTTGTTCGTGCAAGGCGCTGTCGAGGTTCCTTGGACGTTCCATATGGGCGTGTCCCTT	1391
Db	1256	TTCTGTTCGTGCAAGGCGCTGTCGAGGTTCCTTGGACGTTCCATATGGGCGTGTCCCTT	1315
Qy	1392	ATGGGATGAGAAATCTGTGTTTATTTGCAATGATTTGGACACGCGACCTCTGCTGTCT	1451
Db	1316	ATGGGATGAGCACTTGTGTGTTCTTTCGAAACGATTTGGACACATGCACTCTCTGCTGTCT	1375
Qy	1432	ATCTGAAAGCATTTATACAGGACCATATGTTGATATGACATACATCTCGATTCATTATGTTGA	1511
Db	1376	ATCTGAAAGCATTTATACAGGACCATATGTTGATATGACATACATCTCGATTCATTATGTTGA	1435
Qy	1512	TACATTAATCATGCGGACACGAGGCGGTGGGCCACAGATATGAAATTCCTCGTTACCGAGTTGC	1571
Db	1436	TACATTAATCATGCTTACAGGCGGTGGGCCACAGATATGAAATTCCTCTATCATGAAATTCG	1495
Qy	1572	CTGAGCATCTACTGGAAACATTCACAGCTGTATCGACCCCGTGGTGTGTAGCACGCCAACT	1631
Db	1496	CGAGACATTAATCTGGATCACTTCAAGCTGTATCGACCCCGTGGGCGAGACGCCCAACA	1555
Qy	1632	ACTTGCCTCCGCGCTTGAAGATGGCCGACCAAGTTGTTCGTGTGTAGGCCCGCGGTATCTGT	1691
Db	1556	TCTTCGGGCGGCGCTGAAAGATGGCGGACCGGAGTGTGACCGGTATGAGCCCGGCTACTCTT	1615
Qy	1692	GGAGACTCAAGACGCGTGGAGGGCGAGCTGGGGGCTTCACGACATCATACGCGACAGCACT	1751
Db	1616	GGAGACTCAAGACGCGAGGGCGAGCTGGGGGCTTCACGACATCATACGAGAGAACACT	1675
Qy	1752	GGAAGACCCGCGGACATGCTCAACGCGCATTCGACCATATGAGTGGAAACCCGAGGTGACG	1811
Db	1676	GGAAGATGAACGGCATGCTGAAACGGCATTCGACTACGGGAGTGGAAACCCGAGGTGACG	1735
Qy	1812	TCCACTTCAAGTCCGACGCGCTTACACCACTTCTCCCTGGGGACGCTTGAATCTCCGGCAAGC	1871
Db	1736	TGCACCTCAGTCGACGCGCTACGCGCACTTACACCGGTGGCTCCCTGGAATCCACGAAAGC	1795
Qy	1872	GGAGTGAAGAAAGGCGCTGACAGGCGGACGCTGGGCGTGGAGGTCCGCGCGGACGCTGCGCG	1931
Db	1796	CGCGTGAAGAGCGCGCGCTGACAGGCGGACGCTGGGCGTGGAGGTCCGCGCGGACGCTGCGCG	1855
Qy	1932	TGCTTGCGCTTATCGGCGCGCTTGGACGCGGACGAGAGGCGTGGAGATCATCGCGGACGCA	1991
Db	1856	TGATTCGGCTTATCGGCGCGCTTGGACGCGGACGAGAAAGGTGTGGACATCATATGGCGGACGCA	1915
Qy	1992	TGCTTGGATCGTGAAGCCAGGACGCTGACGCTGTGTCAATGCTTGGGACACGCGCGCCAGCAC	2051
Db	1916	TGCTTGGATCGCTGAGGACGCTTGAAGGCGGACGACCAACGCAAGGTGTCGCGGTGGGTGG	1975
Qy	2052	TGGAAGACATCTGTGGGACCTTGCAGAGGGGAGCACACGCAAGGTGTCGCGGTGGGTGG	2111
Db	1976	TGGAAGATATCTGTGAGGCTTGCAGGCGGACGACCAACGCAAGGTGTCGCGGTGGGTGG	2035
Qy	2112	GGTTTCCGTGCGCTTGCGGACCGGATACAGGCGGGGCGCGACGCGCTCTCTCATGCGCT	2171
Db	2036	GGTTTCCGTGTAAGATGCGGACCGGATACAGGCGGGGCGCGAGTGTGTGATATGCGCT	2095
Qy	2172	CCCGGTTGAGCCGTGCGGGTTGAACCAAGCTTTACGCCATGCTTACGCGACCGTCCCCG	2231
Db	2096	CCCGGTTGAGCCGTGCGGGCTTGAACCAAGCTTACGCCATGCTTACGCGACCGTCCCCG	2155
Qy	2232	TGTGTCAACCGCTGCGCGGGGTGAGGACACCGGTGCGCGCTTGAACCCCTTCMAACAAT	2291
Db	2156	TGTGTCAACCGCTGCGCGGGGTGAGGACACCGGTGCGCGCTTGAACCCCTTCMAACAAT	2215

QY	2280	LCCTTCAACCACTCTCGGCGCTTCGGGATGAGACGTTCCAGCCGGCCGAGGCGCAACAAGCTGATCG	2339
Db	1805	CGTTTCGGGAGCGCGGGGCTTCGGATGGAATTTTGTGACCCGGCGCGAGGCCAACAAGCTGATCG	1864
QY	2340	AGGCGCTTCGGGCACTGCGCTCCGCACTCTCCGGGACTCAACAAGAGAGCTGAGGGGCTCC	2399
Db	1865	AGGCGCTTAGGCACTGCGCTCCGACACGTAACCGGAAGTACGGGGAGAGCTGGAAAGAGTCTCC	1924
QY	2400	AGGAGCGCGGCAATGTCGAGGACATTCACTGAGAGACATGCGGCCCAAGCTTACAGGACG	2459
Db	1925	AGGCGCGCGGCAATGTCGAGGACCTCAAGCTGGGACACGCGGCTGAGCTTACAGGACG	1984
QY	2460	TCTCTCTCAAGGCCAAGTACCAATCG	2485
Db	1985	TCTCTGTCAAGGCCAAGTACCAATCG	2010

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RESULT 1
US-10-109-048-1143
/ Sequence 1143, Application US/10109048
/ Publication No. US20040107461A1
/ GENERAL INFORMATION:
/ APPLICANT: COMMURI, PADMA
/ APPLICANT: KEELING, PETER L.
/ APPLICANT: RAMIREZ, NONA
/ APPLICANT: MCKEAN, ANGELA
/ APPLICANT: GAO, ZHONG
/ APPLICANT: GUAN, HANPING
/ TITLE OF INVENTION: GLUCAN CHAIN LENGTH DOMAINS
/ FILE REFERENCE: 2461-76
/ CURRENT APPLICATION NUMBER: US/10/109,048
/ CURRENT FILING DATE: 2003-03-04
/ PRIOR APPLICATION NUMBER: 60/279,720
/ PRIOR FILING DATE: 2001-03-30
/ NUMBER OF SEQ ID NOS: 1154
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 1143
/ LENGTH: 2865
/ TYPE: DNA
/ ORGANISM: Zea mays
US-10-109-048-1143

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Query Match	43.4%	Score 1233.2;	DB 19;	Length 2865;
Best Local Similarity	84.3%;	Pred. No. 0;		
Matches 1388; Conservative	0;	Mismatches 258;	Indels 0;	Gaps 0;

QY	840	GGCGCGCTCAGAGCCCCCGCTGTACAAAGAAAGACTTTGGGAACTTCAAGAAATCATGTGCT	899
Db	1220	CTCTCAACAGTTAGCCATTAGTACACGAGGCCACTTGGGATTTCAAGAAATCATCGGTT	1275
QY	900	TCGAGAGCCCGCTGAGGCCAAGATGATGCGTGGGCTGTGGCAGATGATGCGGCGCTCT	959
Db	1280	TTGACGAGCTTCACGAAGCGAAGATGATTCAGGGTTGGTGCATGATGCTGGTCTTT	1333
QY	960	TTGAACATCACCAAGAACATGATTCGCCACTTTGGCAGGGGAGAAACGTCAAGAACGCG	1015
Db	1340	TTGAACATTATGGGACACATGATTTCTGGGCTTTTGCCGGGAGAAATGTTAAGAACGTGA	1395
QY	1040	TCGTGCTGGCTGCTGAATGTTCTCCCTGGTGCAAAACAGTGGTCTTGGAGATGTGTGCG	1075
Db	1400	TCTGTGTGGCTGCTGAATGTTCTCATGGTGCAAAACAGTGGTCTTGGAGATGTGTGCG	1455
QY	1080	GTCCTTTGCCCAAGCTTTGGCGGAAGAGACATCGTGTATTATGTTGTGTGTTCCAAAGT	1135
Db	1460	GAGCTTTATCCCAAGCTTTAGCGAAGAAAGGACATCGTGTATTATGTTGTGTGTTCCAAAGT	1515
QY	1140	ATGGGGACCTATAGGAGAGCTTCAGATGTGGAGTCCGAAATACTACAAAGCTGCTGCAGC	1199
Db	1520	ATGGGGACCTATGTGGAGAGCTTTGATATGGGAATCCGAAATACTACAAAGCTGCGAGAC	1575
QY	1200	AGGATATGGAAAGTATTTATTTCCATGCTTATATCGATGAGATTGATTTGTTCATTG	1255

Db	1580	AGGACCTAAGAAAGTGAATCTATTTCATGACATTTATTTGATGGAGTCGACTTGTGTTCATCTG	1539
Qy	1260	ACGCTCTCTCTTCCGACACCGCCAGAGAACATTTATGGGGGCACGACACAGAAATTA	1319
Db	1540	ATGCCCTCTTTTCCGGCACCGCTCAAGATGACATATATGGGGGAAAGTAAAGCACAGAAATCA	1699
Qy	1320	TGAAGCGCATGATTTTGTCTCTGCAAGGCGCCTGTCCAGAGTTCCCTGGCACGTTCCATATGC	1379
Db	1700	TGAAGCCCATGATTTTGTTTTGGCAAGGTCTCTGTGAGTTCTCTGGCACGTTTCATATGC	1759
Qy	1380	GCGGTCTCCCTTATGGGGATGGAATATGCTGTATTATTTGCAATGATTTGGCACACGCGCAC	1439
Db	1760	GTGCTGTGTGTGCTACGGAGATGGAATATTTGGTGTTCATTTGCATGATTTGGCACACCTGCAC	1819
Qy	1440	TCTGTCTGTCTATCTGAAAGCATTTATACAGGACCATGTGTTGATGCAGTACACTCGCT	1499
Db	1820	TCTGTCCCTGTTTATCTGAAAGCATATTAACAGAGCCATGTGGTTATATCAGTACACTTCGCT	1879
Qy	1500	CCATTATGTGTATCATTAACATTCGCGGACCAAGGGCCGTGGCCCATGTAGATGAATTCGCGT	1559
Db	1880	CCGCTCTCTGTATCATTAACATATGCCCAAGGGCCGTGTCTCTGATGAATATCCGCT	1939
Qy	1560	TCACCGAGTTGCTCGAGACACTACCTGTGAACACTTTCABACTGTATGACCCCGTGGGTGTG	1619
Db	1940	ACATGGAATTCCTGAAGACATCACTCTTCAACATTTGCAGCTGTATGACATCCCGTGGTGGC	1999
Qy	1620	AGCAGCGCAACTACTTCGCGCGCGGCTGAAGATGGCGGACCAAGTTCGTGGTGAACC	1679
Db	2000	AGCAGCGCAACATCTTTGCGCGGGGTCTGAAGATGGCAGACCGGGTGTGATCTGTCAAGCC	2059
Qy	1680	CCGGGTACTGTGGGAGCTCAAGACGCTGGAAGGGCGGCTGTGGGGCTTCAAGACATCACTAC	1739
Db	2060	GCGGCTACTGTGGGAGCTGAAAGCAGATGGAAGGGCGGCTGTGGGGCTTCAAGACATCACTAC	2119
Qy	1740	GGCAGAAACGATGTGAAGACCCGCGGGCATTCGTCAACCGCATTCGACCAATGAGTGAAC	1799
Db	2120	GTTCTTAACGACTGAAGATCAATGCACTGTGAACGGCATTCGACCAAGAGTGAAC	2179
Qy	1800	CCGAGGTGAGCGTCCACTCAAGTCGAGCGGCTTACACCACTTCTCTGGGGACGCTGG	1859
Db	2180	CCAGAGTGAAGTGCACCTGGCGGTTCGAGCGGCTTACCACTTCTCTGGAGACATCG	2239
Qy	1860	ACTCGGCAAGCGGCAATGTCAGAGAGGCTCTTCAGCGCGCAGACTGGGGCTGCAAGTCCGGC	1919
Db	2240	ACGCTGGAACCGGCAATGTCAGAGAGGCGGCTCTTCAGCGGAGACTGGGGCTGCAAGTGGCG	2299
Qy	1920	CCGAGGTGCGCTGTGGGCTTCAATCGAGCGGCTCTTCAGCGGAGAGAGGCGTGGAGATCA	1979
Db	2300	ACGAGTGTGCGCTGTGGGCTTCAATCGAGCGGCTCTTCAGCGGAGAGAGGCGTGGAGATCA	2359
Qy	1980	TCGGGAGCGCATGCCCTGATCTGTAGCCAGAGCTGCAAGTGTGATCTGTGGGACCG	2039
Db	2360	TCGGGAGCGCATGCCCTGATCTGTAGCGGGGAGAGAGCTGCAAGTGTGATCTGTGGGACCG	2419
Qy	2040	GCCGCAACGACTTGAAGAGCATGCTGCGGCACTTTCAGCGGGAGACACACAGCAAGGTGC	2099
Db	2420	GAGCGGCGGACTTGAAGAGCATGCTGCGGCACTTTCAGCGGGAGAGATCCCAACAAAGTGC	2479
Qy	2100	GCGGTGTGGGTGAGGTTCTCGGTGGCGCTGCGGCGACCGGATCAAGGGGAGCGCGACGCG	2159
Db	2480	GCGGTGTGGGTGAGGTTCTCGGTGTCTATATGGGCACTGCATTCACGCGGGGCGCGACGTGC	2539
Qy	2160	TCTCTATCCCTCCCGGTTTCGAGCGGTGTGAACCAAGCTTATGCGCATGGCCTAAG	2219
Db	2540	TGTGTATCTCTCCCGCTTCGAGCGCTGTGGGCGGCTTACAGGACACGTTGCGCTGTGAC	2599
Qy	2220	GCACGTCCTCCGTGTGACGCGCTGCGCGGGGTGAAGGACACGTTGCGCTTTCGAC	2279
Db	2600	GCACGTCCTCCGTGTGACGCGCTGCGCGGGCTTACAGGACACGTTGCGCTTTCGAC	2659
Qy	2280	CCTTCAACACTCCGGGCTGTGGGTGTGACGCTTCAGACCGCGGAGGCGCAAGGCTGATG	2339
Db	2660	CGTTCGGGAGCGCGGGCTGTGGGTGTGACGCTTCAGACCGCGGAGGCGCAAGGCTGATG	2719

QY	2340	2120	2400	2780	2460	2840	
QY	GGGGGCTGGGCACTGGCTCCGACCTTACCGGGACTTACAAGAGAGCTGGAGGGGCTCC	AGGGGCTTAGGCACCTGCTTCCACACGTACCGGAATACGGAGAGGCTGGAGAAATCTCC	AGGAGCGCGGATGTCGACGAGACTTACAGCTGGGAGCATGCCGCAAGCTTACGAGAGCG	AGGGCGCGGCATGTTCGACGAGACCTCAAGCTGGGACACGCGCTGAGCTTACGAGAGCG	TCTCTCTCAAGGCCAAGTACCAAGTGG	TCTCTCTCAAGGCCAAGTACCAAGTGG	TCTCTTGTCAAGGCCAAGTACCAAGTGG
Db	2399	2779	2455	2839	2485	2865	

```

RESULT 12
US-10-425-114-34283
Sequence 34283, Application US/10425114
Publication NO. US20040034888A1
GENERAL INFORMATION:
APPLICANT: Liu, Jindong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 34283
LENGTH: 1888
TYPE: DNA
ORGANISM: Zea mays
FEATURE:
OTHER INFORMATION: Clone ID: UC-ZMFLMO17241D01_FLI
US-10-425-114-34283

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Query Match	40.9%	Score 1161.2;	DB 18;	Length 1888;
Best Local Similarity	82.9%;	Pred. No. 3.2e-298;		
Matches 1355;	Conservative	0;	Mismatches 238;	Indels 41; Gaps 1

QY	860	TTACAAAGAAGACCTTTGGGACCTTCAAGAAATACATTTGGCTTCGAGAGCCGTGGAGGCC	919
Db	10	GTACAGAGGCCACTTGGGATTTTCAAGAAATACATCGGTTTGAAGAGCTTGAAGGCG	69
QY	920	AAGATGATGAGCTGGGCTGTTCAGATGATGCGGCTCTTTGAACATCACAGAACCAT	979
Db	70	AAGATGATTTCCAGGGTTGTGCGATGATATGCTGTTCTTTGAACATTAATGGGACAAT	129
QY	980	GATTCGGACCTTTTGGCAGGAGGAGAACTCATGAACGTGTCGTGCGCTGCTGAATGT	1039
Db	130	GATCTGGGCTTTGGCCGGGAGAAATGTATGAACGTATCGTGTGCGCTGCTGAATGT	189
QY	1040	TCTCCCTGTGTCCAAAACAGTGTGTTTGGAGATGTTCGCGGTCTTTGGCCCAAGCTTTG	1099
Db	190	TCTCCATGTGTGCCAAAACAGTGTGTTTGGAGATGTTTGGGAGCTTTTACCMAAGCTTTTA	249
QY	1100	GCGAAGAGAGACATCGTGTATGTGTTTGGATCCAAAGTTATGGGACATATAGAGAACCC	1159
Db	250	GCGAGAAAGGACATCGTGTATGTGTTTGGATCCAAAGTTATGGGACATATGTGGAAACC	309
QY	1160	TACGATGTGGAGTCCGAAATACTACAAGGCTGCTGAGACAGATATGGAAGTGAATAT	1219
Db	310	TTTGTATTTGGGAATCCGGAATACTACAAGCTGTGAGAGACAGAGACTTGAAGTGAACAT	369
QY	1220	TTCCATGCTTATTCGATGAGAGTGAATTTGTTCATTTGACGCTCTCTCTTCGACAC	1279
Db	370	TTCCATGCAATTTATGATGAGAGTGCACCTTTGTGTTCAATTGATGCCCCCTTTTTCGGGAC	429
QY	1280	CGCAGAGAAGCATTTATGGGGGACAGACAGAGAAATTAATGAAGCGATGATTTTGTTC	1339

Db	430	CGTCAAGATGACATATATATGAGGGGAAGTAGGACAGGAAATCATGAAGCGCATATTTGTTT	489
QY	1340	TGCAAGCCCGCTGTGAGAGTTCCTTGGCAGCTTCATGCGCGGTCTCCCTTAAGGGAT	1398
Db	490	TGCAAGGTGCTGTGAGGTTCCTTGGCAGCTTCATGCGCGGTGTGTGTACGAGAT	549
QY	1400	GGAATATCGTGTTTATTTGCAAAATGATTGGACAACGGACATCTGCGCTGTATCTGAAA	1458
Db	550	GGAAATTTGGTTTCATTGCGAAATTTGGACAATGCACTGCACTCTGCTGTTTATCTGAAG	609
QY	1460	GCATATTTACAGGAGCCATGTGTTTATGATGACATGCACTCGGTCCATTAATGATACATTAAC	1519
Db	610	GCATATTTACAGAGACATGGGTTAATGAGTACATCTGCTCCGTCTCTGATACATTAAC	669
QY	1520	ATCGGACACAGGCGCGTGCGCCAGTAGATAAATTCCTTCACCGAGTTGCTGAGAC	1579
Db	670	ATCGCCCAACAGGCGCGTGCTGTGTGATAAATTCCTTCATAGGACTTCTCTGACAC	729
QY	1580	TACCTGGAACACTTCAGACTGTAGAACCCCGGTGTGTAGCAACGCAATCACTTGCC	1639
Db	730	TAC-----CGCCAAATCTTGCC	748
QY	1640	GCCGACCTGAAGATGCGGACACAGGTGTGTGTGTGAGCCCGGATCACTGTGGAGCTC	1699
Db	749	GCGGATCTGAAGATGCGGACCGGATGTGACTGTCAACCGCGCTACTGTGTGGAGCTG	808
QY	1700	AAGACGCTGAGGCGGCTGTGGGGCTTTCAGACATCATACGGCAGAAAGCATGGAAGAC	1758
Db	809	AAGACAGTGAAGGCGGCTGTGGGCTTTCAGACATCATCGTTCTAACGACTGGAAGATC	868
QY	1760	GCGGCACTGTCAACCGGCTTGACAAACATGAGATGGAACCTCCAGAGTGAAGTCACTC	1819
Db	869	AATGACATCGTGAACCGGCTTGACCAACAGGAGTGAACCCCAAGTGAAGTCACTC	928
QY	1820	AAGTCGAGCGGCTACACCAATTCCTCCCTGGGAGCGCTGAATCCTCGGCAACGGGAGTGC	1879
Db	929	CGGTGAGCGGCTACACCAATTCCTCCCTGAGACATCTGACGCTTGAAACGGGAGTGC	988
QY	1880	AAGGAGGCGCTGACACGCGAGCTGGGCTGTGAGGTCCGCGCGACGTTGCGCTCTCGGC	1939
Db	989	AAGGCGGCGCTGACAGCGGAGCTGGGCTGTGAATGTGGCGACGATGTCGCTCTCGGC	1048
QY	1940	TTCAATCGGCGCTTGAACCGGCGAGAGGGCGTGAATCATCGCGAACCCATGCTCTGG	1999
Db	1049	TTCAATCGGCGCTTGAATGACAGAAAGGCGTGAATCATCGGAGACGCGATCCGTTG	1108
QY	2000	ATCGTAGGCAAGACGTGACGTGTGATGCTGGGACACCGGCGGCGACGACTGAGAGC	2059
Db	1109	ATCGCGGAGGACGACGTGACGTGTGATGCTGGGACACCGGCGGCGCGACCTGGAACGA	1168
QY	2060	ATGCTGCGGCACTTTCGACCGGAGACACACAGCAAGGTGCGCGGTGTGGGTTCTCC	2119
Db	1169	ATGCTGAGACACTTTCGACCGGAGACATCCACAAAGGTGCGCGGTGTGGGTTCTCC	1228
QY	2120	GTCGCGCTTGGCGACCGGATTCACGGCGGGCGCGACGCGCTCTCATGCTCTCCGTTTC	2179
Db	1229	GTCGCTATGCGGCACTCCGATTCACGGCGGGCGCGACGCTGTGTGATGCTCTCCGCTTC	1288
QY	2180	GAGCGGTGCGGTTGAACCAAGCTTTAAGCCATGCGCTCAAGGACCCGTCTCCGTGTACAC	2239
Db	1289	GAGCCCTGCGGCTGAACCAAGCTTTAAGCCATGCGCTCAAGGACCCGTCTCTGTGTGTACAC	1348
QY	2240	GCGCTCGGCGGGGTGAAGGACACGCTGCGCGCTGTGACCCCTTCAACCACTCGGCGTCC	2299
Db	1349	GCGGTGCGGCGGCTCAAGGACACCGTGTGCGCGCTGTGACCCCGTTTCGCGGACCGCGGCTC	1408
QY	2300	GAGTGAAGTTTCGACCGCGCCGAGCGCACAAAGCTGATGAGGCGCTCTCGGACATGCTCTC	2359
Db	1409	GAGTGAAGTTTTCGACCGCGCCGAGCGCACAAAGCTGATGAGGCGCTCAAGGACATGCTCTC	1468
QY	2360	CGACCTTACCGGCACTTCAAGAGAGTGTGAAGGGGCTTCAAGAGCGCGGCACTGTGCGAC	2419
Db	1469	GACACGTACCGGAAGTACGGGAGAGCTGTGAAGAGTGTCCAGGCGCGCGGCACTGTGCGAC	1528

QY	2420	GACITTCAGCTGGGAGCAGCCGCCAAGCTTACAGAGGACCGTCTCTCAAGGCCAAGAC	2479
Dd	1559	GACTCAGCTGGGACCACGC GGCTGAGCTCTACAGAGCGTCTTGTCAGA GCCCAATAC	1588
QY	2480	CAGTGTGACAGCT	2493
Dd	1589	CAGTGTGAACCTT	1602

RESULT 13
US-10-628

US-10-628-525-8
; Sequence 8, Application US/10628525
: Publication No. US2004018511A1

Query Match	38.9%;	Score 1104.6;	DB 19;	Length 2007;
Best Local Similarity	81.7%;	Pred. No. 3.7e-283;		
Matches 1340;	Conservative 0;	Mismatches 289;	Indels 12;	Gaps 5;

Db	434	TTGACGACCTCGACGAAACCGAAGATGATATTCACAGGTTGGTCGAGATGATGCTGGTTCTT	493
Oy	960	TTGAACATCACAGAAACCATGATTTCCGGACCTTTGGACGGGGAGAACGTGATGACGTGG	1019
Db	494	TTGAACATTA-TGGGACAAATGATCTTGGGCCTTTG--TGGGAGAAATGTTATGAACGTGA	550
Oy	1020	TCGTGCTGCTGCTGGAATGTTCTTCCCTGGTGCAAAACAAGTGGCTTTGGAGATGTTGCCG	1079
Db	551	TCGTGTGTGGCTCGTGAATGTTCTTCATGCTGCAAAACAAAGTGGCTTTGGAGATGTTGTGG	610
Oy	1080	GTGCTTTGGCCCAAGGCTTTGGCCGAAAGAGACATCGTGTTATGTTGTGTGTGACCAAGT	1139
Db	611	GAGCTTTACCCAAAGCTTTTACCGAAAGAGACATCGTGTATTATGTGTGTGTACCAAGT	670
Oy	1140	ATGGGACATATGAGGAAGCCTACAGATGTCCGAGTCCGAAAATATCTACAAGCTGCTGGAC	1199
Db	671	ATGGGACATATGAGGAAGCCTTTGATATGGAATCCGAAATATCTACAAGCTGCAGAC	730
Oy	1200	AGATATGGAAGTGAATTTATTTCCATGTCTTATATCATGAGTGTGATTTTGTGTTCAATG	1259
Db	731	AGGACCTTAGAAGTGAACATATTTCCATCATATTTATGATGAGTGTGACATTTGTGTTCAATG	790
Oy	1260	AAGCTCCCTCTTCCGACACCCGACGAGGAAGACATTTATGGGGGACAGACAGCAAGAAATTA	1319
Db	791	ATGCTCT--TTCCGGACCCGTAAAGTGCATATATGGGGAAAGTAAAGGCAAGAAATCA	847
Oy	1320	TGAAGCGCATGATTTTGTCTGCAAGGCGCGTGTGAGGTCTCTTGACAGTTCATGCG	1379
Db	848	TGAAGCGCATATTTTGTGTTTGGCAAGGTGTGTGTAGAGTTCCTTGACAGTTCATGCG	907
Oy	1380	GCGGTGCTCTTATGCGGATGGAATCTGTGTTTATTTGCAATGATTTGGCACACGGCAC	1439
Db	908	GTGTGTGTGTGTACGGAGATGGAATTTGGTGTTCATTGCGCATGGAATTTGGCACCTGCAC	967
Oy	1440	TCCTGCCGTATATCTGGAAGCATATTAACGGGACCAATGGTTTATGACAGTACCTCGGT	1499
Db	968	TCCTGCCGTATATCTGGAAGCATATTAACGAGACCAATGGTTTATGACAGTACCTCGCT	1027
Oy	1500	CCATTATGATATCATTAACATCTCGGCACCAAGGCGGTGGCCAGTAGATGAATTCGGT	1559
Db	1028	CCGTCTCTGATATCATTAACATGAGGCCACCAAGGCGGTGGTCCGTATGAAATTCGGT	1087
Oy	1560	TCACCGAGTTCCTGAGACATTACTCTGGACACTTCAACTGTATACATCCCGTGGGTGTGT	1619
Db	1088	ACATGAGCTTCTGAACACTTAACCTTCAACACTTTCGAGCTGTATGATCCCGTCGGTGGCG	1147
Oy	1620	AGCACGCCAATCACTACTGCGCGC---CGGCTGAAGATGGGGGACCAAGTGTGCTGTGA	1676
Db	1148	AGCACGCCAATCACTTGTGCGCGGTGTCTTGAAGATGGGACCAAGTGTGTGACTGTCA	1207
Oy	1677	GCCCCGGGTACTGTGGAGAGCTCAAGAAGCGGTGAGGGCGGCTGGGGGCTTTCACGACATCA	1736
Db	1208	GCCGGGGTACTGTGGAGAGCTGAAGACATGGAAGAGCGGCTGGGGGCTTCACGACATCA	1267
Oy	1737	TACGGCAGAACGACTGAAGACCCGCGGCATGTCACACGGCATGACACATGAGTTGA	1796
Db	1268	TCCGTTCTAAGCATGGAAGATCAATGGCAATTCGTGAACGCATGACACACAGGAGTGA	1327
Oy	1797	AACCCGAGTGAAGTCCCACTCAAGTCCGACGGCTTACCAATTCTCCCTGGGGAGCG	1856
Db	1328	AACCCGAGTGAAGTCCGTCGAGTCCGAGCGGCTTACCAACTACTCTCCCTGAGACAC	1387
Oy	1857	TGACATTCGGCAACGGGACATGCAAGAGAGCCCTGCACGGCAGCTGAGGCTCGACGCTC	1916
Db	1388	TCGACGCTGGAAGACGGGACATGCAAGGCGGCTTCGACGGGAGCTGGGCTTGGAATGTC	1447
Oy	1917	GCGCCGACGTGCGCTGCTCGGCTTCAATCGGCGGCTTGAACGGGCAAGAGGGCGTGAAG	1976
Db	1448	GCGACGACGTGCGGCTGCTCGGCTTCAATCGGCGGCTTGAATGACACAGAGGGCGTGAAG	1507
Oy	1977	TCATGTCGGAACGCCATGCTCTTGATTCGTGAACCAAGATGTACAGCTGTATCTGTTGGCA	2036
Db	1508	TCATTCGGGAGCGCATGCTGATATCGCGGGGACAGAGTGCACACTGTGTATGCTTGGGCA	1567

OY	2037	CCGGCCCGCAGCACTGTGAGAGCATGCTTGGCGCACTTGGACGGGAGCACTCAGACAAG	2096
Db	1568	CCGGGCCCACTGACCTTGGAAGAAATGCTGCAGACACTTGGAGCCGGAGCATCTCCAACAAG	1627
OY	2097	TGCGCGGGTGGAGTGGGGTTCTCCGNGCGCTTCGGCGCACCCGATATCAGCGCGGGCGCCAGC	2156
Db	1628	TGCGCGGGTGGGTCCGGGTTCTCCGCTCTAATGTGTGCATCCGATATCACCGCGGGCCAGCG	1687
OY	2157	CGCTTCTCATGCCCTCCCGGTTTCGAGCCGTCGGGGTTGAAACCACTTTACGCCATGACCT	2216
Db	1688	TGCTGTGATATCCCTCCCGCTTTCG---CCGGCGGGCTGAACCAACTCTACCGCATGCGAT	1744
OY	2217	ACGGCACCGTCCCGTGGTGCACGCGTCGGCGGGGTGAGGGAGAACCGTGGCGCGCTTCG	2276
Db	1745	ACGGCACCGTCCCTGTGTGTGCACGCGTGGCGGGCTTCAGGGAGAACCGTGGCGCGCTTCG	1804
OY	2277	ACCCCTTCAACCACTCCGGGCTTCGGGTGGAAGTTTGCACCGCGCCGAGCGGCACAAAGCTGA	2336
Db	1805	ACCGTTTCGGCGAGCGCGGGGCTCCGGGTGGACTTTTGAACCGCGCGAGGCCAACAAAGCTGA	1864
OY	2337	TTCGAGGCGCTGGGGCATGTGCTTCCGCACTACCGGACTACAAAGAGAGCTTGGAGGGGCC	2396
Db	1865	TCGAGGTGCTCAGGCCACTGCTTCGACAGTACCGAAATTCAGAGAGAGAGCTCGAAGAGTC	1924
OY	2397	TTCAGAGACGGCGCATGTGCGAGCACTTCACTGGAGCATGCCCAAGCTTACAGAG	2456
Db	1925	TTCAGAGCGCGGGCATGTGCGAAGAACTCACTGGAGACCAAGCGGCTGAGCTTACAGAG	1984
OY	2457	ACGTCCTCTCAAGCCCAAGT	2477
Db	1985	ACGTCCTTGTCAAGTACCAGT	2005

```

RESULT 14
; US-10-425-115-149880
; Sequence 149880, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 149880
; LENGTH: 2813
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_68215C.1
; US-10-425-115-149880

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Query Match	37.2%;	Score 1058.6;	DB 20;	Length 2813;
Best Local Similarity	79.1%;	Pred. No. 7.1e-271;		
Matches 1272;	Conservative	0;	Mismatches 334;	Indels 3;
			Gaps 14;	

QY	886	GAATTAACATTGGCTTCGAGGAGGCGCGTGGAGGCGCAAGATATATGCTGGCTGTTCGAGA	945
Db	619	GGAAAGCATTAAGCATTCGCTGAACCGGTGGATCTTAAGGCTATGACGCTCCGGCTTACAGA	678
QY	946	TGATGCGG---GCTTCCTTTGAACATCAACCAACCATGATTTCCGAACTTTTGGCAGGGGA	1002
Db	679	TGCGCGGCGGAGGTGTCTCCCTTATGAACAGGAGGATATATAACTTGCGCTTTGGCTGGGCC	738
QY	1003	GAACTCATGAACGTCGTCTGTCTGTCGTGTAATGTCTCCCTGTGCAAAACAGGTGG	1062
Db	739	TAAATGATGAACCGTCGTGGTGGCTTCTGAATGTCTCTTTCTGCAACACAGGTGG	798

QY	1063	ICTTGGAAATGTTGCGCGGTGCTTTGGCCCAAGGCTTTGGCCGAAGAGACATCGTGTAT	1122
Db	799	CCTTGGAAATGTCGTGGGTGCTTTGGCCCTTGAAGCTCTGGCCAGAGAGACACCGTGTAT	858
QY	1123	GGTGTGGTACCAAGGTATGGGGACTATAGAGAAAGCCATACATGTCGAGTCCGAAATA	1182
Db	859	GGTCGTGTATCCAAAGATATATGGAGAGTATCCGAAGCCCGGGATTTAGTGTATAGAGACG	918
QY	1183	CTACAAAGGCTCTGGACAGAGATATGGAAGTAAATTAATTCATGCTTATATCATGTAGAGT	1242
Db	919	TTACAAGGTACTGGACAGAGATTAGAAAGTTACTTATTTTCACTTTCATGTATGAGAGT	978
QY	1243	TGATTTTGTGTTCAATTGACGCTCTCTCTTCCGACACCGCCAGAGAACATTTATGGGGG	1302
Db	979	TGATTTTGTATTTGATAGAAAGCCCTCTCCCTCCGGCACCGGCACAAATATATTTATGGGGG	1038
QY	1303	CAGCAGAGAGAAATTATAGAGCCCATGATTTTGTCTCGAAAGGCCGTGTGCGAGTTC	1366
Db	1039	AGAAAGATTGATATTTTGAAGCCGATATTTTGTCTGCAAGGCCGTGTGTAAGGTTC	1096
QY	1363	TTGGCACCTTCCATATGCGCGCGGTGTCCCTTATGGGAGATGGAATCTGTGTTATTTGCAAA	1422
Db	1099	ATGTGATGTCATCATATGTGGCGGTACTGTCTATATGTGATGTGCAACTTATGTTTCATTCCTAA	1156
QY	1423	TGATTTGGCAACGGCACTCTGCTGTCTATCTGAAGCATATTAACAGGACCATATGTTT	1482
Db	1159	TGATTTGGCATCCCACTTCTGCTGTCTATCTTAAAGCCCTATTTACCGGGCAAAATGCTTT	1218
QY	1483	GATGCAGTACCTGGTTCATTAATGTGATATCATTAACATGCGGCACAGGGCCGTGGGCC	1544
Db	1219	GATGCAGATGCTGCTGTCTGTGCTTGATATCAACAACATGCTCATACAGGTCGTGGGCC	1278
QY	1543	AGTAGATTAATTTCCGTTCAACCGAGTGGCCCTGAGACACTACCTGGAAACCTTCAAGCTGTA	1602
Db	1279	TGTAGACGACTTTCGTCAATTTTGACTTGCTCCGGAACATCAATCGACACTTCAAACTGTA	1338
QY	1603	CGACCCCGTGGTGTGTAGACACGCCAACAATCTTGTCCGCGCGGCTGAAGATGGCGGACCA	1662
Db	1339	TGACAAACATGTGTGGGATTCACACAACAATTTTGTGCGGGGCGTGAAGAAGCGACAGACG	1398
QY	1663	GGTGTGCTGTGAGCCCCGGGTACCTGTGGGACTCAAGAAGGTGAGAGGGCGGCTGGGG	1722
Db	1399	GGTGTGTGACCTGTAGCAATGTCTATCATGTGGGAGCTGAAGCTTCGGAAGGCGGGTGTGGG	1458
QY	1723	GCTTCAACGACATCATACGGGAGAAAGCACTGGAAGAACCGCGGCACTGTCAACGGCATGGA	1782
Db	1459	CCTCAGACATCATTAATAACAGAAAGCATGTGAACTGAGGACATCTGTGAACGGCATGGA	1518
QY	1783	CAACATGGAGTGAACCCCGAGGTGAGAGTTCACCTCAAGTCGAGCGGCTACACCAACTT	1842
Db	1519	CATGAGGAGTGGAAACCCCGCTGTGTGAGAGTGCACCTCCACCTCGACGACTACACCAACTA	1578
QY	1843	CTCCCTGGGAGCGCTGGACTTCGGGCAAGCGGCAGTGCAGAGAGCCCTGCAAGCGGAGCTT	1902
Db	1579	CACGTTGAGAGCGCTGGAACACCGGCAAGCGGCAATGTGCAAGGCCCTCTGCAAGCGGAGCTT	1638
QY	1903	GGGCTGAGAGTCCGGCCCGGACGTCGCGGCTGTGGCTTATATGGCCGCTCGAGCGGGCA	1962
Db	1639	GGGCTGAGAGTCCGGCCCGGACGTCGGAATGTATGGGTTATATCGGCGGCTCGAGCAACCA	1698
QY	1963	GAAAGGGGTGAGATTCATTCGCGGAAGCGCATGCTCTGTGATCTGTGACAGAGACGTCGAGCT	2022
Db	1699	GAAAGGGGTGGAATTAATTCGCGGAGCGGCACTGTATGGGTTATATCGGCGGCTCGAGCAACCA	1758
QY	2023	GGTATGCTGGGGCACCGGCGGCGCACGATCTGTGAGAGCATGTCTGGGCACTTTCGAGCGGGA	2082
Db	1759	CGTATGCTGGGGCACCGGCGGCGCGACCTGTGAGAGCATGTCTGGCGGCTTTCGAGTGGGA	1818
QY	2083	GCACACGACAAAGGTGGCGGGGTGGGTGGGTTTCTCGTGGCGCTTGGCGGACCGGATTCAC	2142
Db	1819	GCAACGACGCAAGGTGGCGCGGTGGGTGGGTTTCTCGTGGCGCTTGGCGGACCGGATTCAC	1878
QY	2143	GGCGGGGCGCACCGGCTCTCATGAGCCCTCCCGGTTTGAAGCGCTGTGGCGGTTGAACAGCT	2202

[illegible]

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RESULT 15
US-10-336-753-48
; Sequence 48, Application US/10336753
; Publication No. US20030226176A1
; GENERAL INFORMATION:
; APPLICANT: Guan, Haping
; APPLICANT: Keeling, Peter L.
; TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN
; TITLE OF INVENTION: HOSTS
; FILE REFERENCE: 2461-52
; CURRENT APPLICATION NUMBER: US/10/336,753
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/09/402,254
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/06660
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/042,939
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-04-04
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 48
; LENGTH: 2423
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (join(1..2094, 2098..2103, 2107..2304, 2308..2421))
US-10-336-753-48

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Query Match	36.9%	Score 1049;	DB 17;	Length 2423;
Best Local Similarity	78.7%	Pred. No. 2.4e-268;		
Matches 1266; Conservative	0;	Mismatches 340;	Indels 3;	Gaps 1;

OY	886	AAATACCTTGGCTTCGAGGAGCCCGTGGAGCCAAAGATATATGGCTGGGCTGTTGACA	945
Db	492	GGAAAGCATAGGCATCGCTGAAACCGGTGAAATGCTAAAGCTATAGCTGCGGCTTACAGA	551
OY	946	TGATGCG---GCTCTTTGAAACATCACAGAAACCATATTCGCGACTTTGGCAGGGGA	1002
Db	552	TGCGGCGGCAAGTGTCTCTTATGACAGGAGATATATAACCTGGCCCTTTGGCTGGGCC	611
OY	1003	GAACTCATGAACTGTGTCTGTGGCTGTGAATGTTCTCCGTGGTCAAAACAGCTGG	1062
Db	612	TAATGTGATGAACGTCGTGTGGTGGCTTCTGAATGTCTCTTTCTCAGACAGGTGG	671
OY	1063	TCTTGAATGTGCGCGGTCTTTGGCCAAAGCTTTGGCGAAGAGACATCTGTAT	1122
Db	672	CTTGGAAATGTCTGGGGTGTCTTGGCTTAAGGCTCTGGCAGAGAGACACCGTGAT	731

OY	1123	GGTTGTGTACCAAGGATATGGGACTATATGAGAGAACCTACAGATGTCCGAGTCCGAAATA	1182
Db	732	GGGTGTATACCAAGATATATGAGATATGCGGAAGCCCGGAGATTTAGTGTATAGAACACG	791
OY	1183	CTACAGAGCTGCTGAGACAGATATAGAAAGTAATATTTCTCATCTCTATATATCATGTAGT	1242
Db	792	TTACAAAGTATCTGACACGATTCAGAAAGTTACTTATTTTCACTTACATATGATGAGT	851
OY	1243	TGATTTTGTCTCATATGACGCTCTCTCTTCCGACACCGCCAGAGAACATTTATGGGCG	1302
Db	852	TGATTTTGTATCTGTAAGAGCCCTCTCCCTCCGCGACCAATATATTTATATGGGGG	911
OY	1303	CAGACAGACAGAAATTTATGAAAGCCATGATTTTGTTCGAAGGCCCTGTCCGAGTTC	1362
Db	912	AGAAAGATTTGATATTTTGAAGCCGACATGATTTTGTTCGAAGGCCCTGTGAGTTC	971
OY	1363	TTGGCAGGTTCCATAGCGCGCGGTGTCCTCTATATGGGATATGAAATATGTGTTATTTGAAA	1422
Db	972	ATGATATGCTTCATATGTCGCGTACTGTCTATATGATATGGCACTTAAGTTTTCATTGCTAA	1031
OY	1423	TGATTTGGCACAAGGCACTCTCTGCTCTCTATATCTGAAAGCATTTACAGGACCATGTGTT	1482
Db	1032	TGATTTGGGATATCCGCACTTCTGCTCTGTCTATCTAAAGCCATATTAACGGGACATATGTTT	1091
OY	1483	GATGCACTACACTGTGTCTCATTTATGATATACATATATGCGGACCAAGGCCCTGTGCC	1542
Db	1092	GATCAGATATGCTGCTGTGCTGTGTGATACACAACTTGCTCATAGGATCGTGTGCC	1151
OY	1543	AGTATGATGAAATTTCCGTTACCCGATTCGCGTTCGCGAGCACTACCTGGACACTTCAGACTGTA	1602
Db	1152	TGTATAGCATCTTCATCAATTTTATCTTGCTCTGAAACATACATGCACTTCACAACTGTAT	1211
OY	1603	CGACCCCGGTGGTGTGTGAGCAGCGCACTACTTCGCGCGCGCTGGAATGGCGGACCA	1662
Db	1212	TGACAAACTTGTGTGGGATACACAGCAAGTTTTTGTGTGGGGGTGAAGAAGCGGACACG	1271
OY	1663	GGTTGTGTGTGAGCCCGGGATCTCTGTGGAGCTCAAGCGGTGAGGGCGGCTGTGGG	1722
Db	1272	GGTGTGTACCTTTATGCAATGTGCTACATGTGGGAGCTGAAGAATTTCGAAAGCGGGTGTGGG	1331
OY	1723	GCCTTCAGCACTCATACGGGAGAAACGACTGGAGAACCCGGGGCATATGTCAAACGGCATCGA	1782
Db	1332	CTCTCAGCACTCATTAACCAAGAACGACTGGAACTGCAAGGCAATCGTGAACGGCATTCGA	1391
OY	1783	CAACATGAGTGTGAACCCCGAGTGTGAGACTGCATCTCAAGTCGAGCGGCTTACACCACTT	1842
Db	1392	CATBAGCAGTGTGAACCCCGCTGTGTGAGATGTGACCTCCATCCGACGATACACCAACTA	1451
OY	1843	CTCCCTGGGAGCGCTGGAATTCGGGCAAGCGGCACTGCAAGAGGCGCTTCGACCGGAGCT	1902
Db	1452	CACGTTGAGACGCTGTGACACCGGCAAGCGGCAAGTGCAAAGGCGCGCTTCGAGCGGAGCT	1511
OY	1903	GGGCTTCAGAGTCCGCGCCGACATGTGCGGCTGTGCTTCAATCGGCGCGCTTCGAGCGGGA	1962
Db	1512	GGGCTTCAGAGTCCGCGACGACGTCGCACTGATGTGGGTTCAATCGGCGGCTTCGACACCA	1571
OY	1963	GAAAGCGCTGAGATTCATTCGCGAGCGCATGTGCTGTGATCGTGTGACGAGACGTGTGACGT	2022
Db	1572	GAAAGCGCTGTGACATCATCCGCGACCGGATTCATCTGATATCGGGGAGAGACGTGTGACGT	1631
OY	2023	GGTCATGCTGTGGGACCGGCGCGGACGACCTTGAGAGAGATCTGTGGGCACTTTCGAGCGGA	2082
Db	1632	CGTATGCTGTGGGACCGGGCGGGCCGACCTTGAGAGACATGCTGTGGGCGGTTTCGAGTCCGA	1691
OY	2083	GCATCAGACAAAGTGTGGCGGGTGTGGGGTTTCTCCGTGTGCTGTGGCGCACCGGATATAC	2142
Db	1692	GCAACAGGACAAAGTGTGGCGGGTGTGGGGTTTCTCCGTGTGCTGTGGCGCACCGCATATAC	1751
OY	2143	GGCGGCGCGGACCGGCTCTCATGTGCGCTCCCGGTTTGGAGCGGTGTGAGCGGTTTGAACCAAGCT	2202
Db	1752	GGCGGCGCGGACACTCTCTGTGTGATGCGGTGTGAGCGGTGTGAGCGGCTGTGAACCAAGCT	1811
OY	2203	TTAGCGCATGGCTTACGGCACCGTCCCGCTGTGTGACAGCGGTGTGGCGGGGTGAGGACAC	2262

Db	1812	CTACGCCATGGCGTACGGGACCGTGCCGCTGCTGCAACGCCGCGGGGGCTCCGGGACAC	1871
Qy	2253	CGTGCCGCGCTTCGACCCCTTCAACCACTCCCGGCTCGGGTGGAGTTGACCGGCGCGA	2322
Db	1872	GCTGGCGCGCTTCGACCCGTTCAACGACACCGGGCTCGGGTGGAGTTGACCGGCGCGA	1931
Qy	2323	GGCGCACAAGCTGATCGAGGCGCTCGGGCACTGCTCCGCACTAACCGGGACTACAGGA	2382
Db	1932	GCGCAACGGATGATCGAGCGCTCTCGCACTGCTTACCACTGACCGGACTACAGGA	1991
Qy	2383	GAGCTGAGGGGCTTCAGAGACGGCGCATGTGCAAGACTTCAGCTGGGAGCATGCCG	2442
Db	1992	GAGCTGGCGCGCTGCAAGGCGCGCGCATGGCCGAGACCTCAGCTGGGACCAACCGCG	2051
Qy	2443	CAAGCTTACGAGGAGCTCTCTCAAGGCCAAGTACCAAGTGTGAGCG	2491
Db	2052	CGTCTGTATGAGGAGTGTCTGTCAGGCGAAGTACCAAGTGTGAGCG	2100

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 Job time : 1669 secs

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